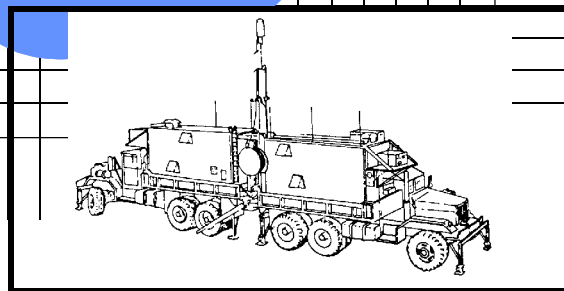
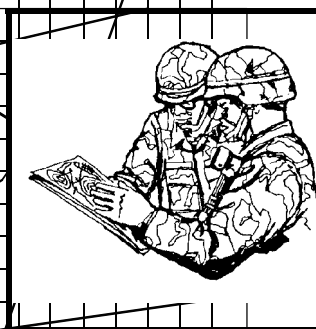
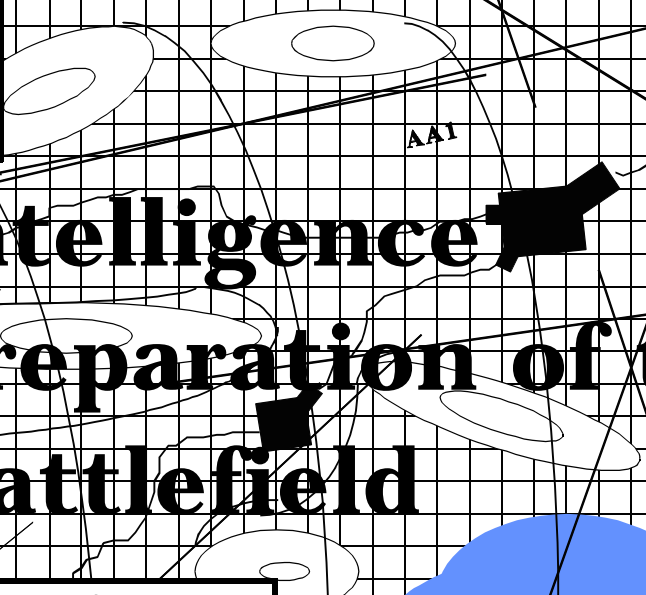
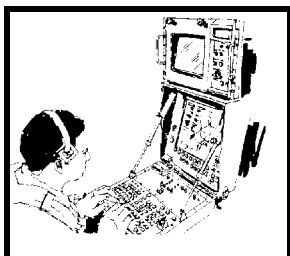




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Intelligence Preparation of the Battlefield (IPB)

FOREWORD

All S2s at the battalion and brigade level who train at the Combat Training Centers (CTCs) want to do well and ensure mission success for their units. The Intelligence Preparation of the Battlefield (IPB) process drives the entire Tactical Decision-Making Process (TDMP). IPB provides the basis for defining the courses of action (COAs) available to the friendly commander and drives the wargaming process that integrates and synchronizes the COA which, ultimately, leads to a staff recommendation to the commander. A good IPB is critical to the success of a unit's mission. Without the staff developing, integrating, and synchronizing IPB products with the TDMP, the likelihood of a successful mission is remote.

The S2 is, and should be, the focal point to track the enemy situation. He should know the enemy's doctrine, organization, tactics and capabilities for all the Battlefield Operating Systems (BOSs) from the Army to the Motorized Rifle Platoon. In contingency operations, the S2 should also be knowledgeable of all aspects of the warring factions including their force structure. Simultaneously, the S2 must have nearly the same proficiency and knowledge as the S3 on friendly operations to synchronize intelligence and combat operations with enemy actions. However, intelligence sections are usually understaffed and overworked. IPB is not just the responsibility of the S2. He needs the assistance of the entire staff. During the early stages of mission analysis, the S2 and S3 are very busy. Frequently, other staff sections are not as busy. These staff personnel need to assist the S2 with the IPB process during mission analysis. Each staff officer should analyze their specific BOS and provide that analysis to the S2. In this way, the expertise of the entire staff is used to help develop better IPB to support the commander and the TDMP.

Historically, at the combat training centers (CTCs), staff integration and Reconnaissance and Surveillance planning are two problem areas within the IPB process. This newsletter discusses some common problems that brigade and battalion S2s experience at the CTCs. It provides recommended techniques and procedures that commanders and S2s can implement to fix these problems. This newsletter builds upon TTPs already discussed in **CALL Newsletter 93-3, *The Battalion and Brigade Battle Staff*, CTC Quarterly Bulletin 95-4, *Brigade and Battalion Task Force Planning Process*, CALL Newsletter 95-7, *TOC Operations*, and CALL Newsletter 95-12, *Tactical Decision Making: "Abbreviated Planning."***🔗

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TTP for Intelligence Preparation of the Battlefield

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Section I

DOCTRINAL OVERVIEW

Intelligence Preparation of the Battlefield (IPB) is a systematic, continuous process of analyzing the threat and the environment. IPB supports staff estimates and the decisionmaking process. It helps commanders apply and maximize their combat power at the critical point in time and space on the battlefield. The doctrinal principles of IPB are sound and can be applied to all situations at all levels. However, the tactics, techniques, and procedures (TTP) of applying IPB may vary according to the mission, enemy, terrain, troops, and time available (METT-T) situation.

The doctrinal principles of IPB call for:

- Evaluating the battlefield's effects on friendly and threat operations.
- Determining the threat's possible COAs and arranging them in order of probability of adoption.
- Identifying key threat assets for each COA (high value targets (HVTs)) and where they will appear on the battlefield (target area of interest (TAIs)).
- Identifying the activities, or lack of, and the locations where they will occur that will assist in identifying which COA the threat adopts.

IPB accomplishes the following:

- Identifies facts and assumptions about the battlefield environment and the threat. This enables staff planning and the development of friendly COAs.
- Provides the basis for intelligence direction and synchronization that supports the command's chosen COA.
- Contributes to complete staff synchronization and the successful completion of several other staff processes.



The four IPB steps are:

1. Define the battlefield environment.

- Identify characteristics of the environment.
- Establish battle space.
- Identify gaps.
- Evaluate existing data base.

2. Describe battlefield effects.

- Analyze battlefield environment.

■ **Terrain analysis** - Evaluate the military aspects of the battlefield's terrain to determine its effects. Use the key word **OCOKA**. Consider all factors when analyzing terrain, but focus on the relevant ones. S2s must explain the significance and purpose of key terrain. What does it do for the owner? Maybe it's the confluence for all major enemy avenues, or a defile as the only exit to the enemy's objective. S2s should also address decisive terrain, if applicable.

O - Observations and fields of fire

C - Cover and concealment

O - Obstacles

K - Key terrain

A - Avenues of approach

■ **Weather analysis** - analyze military aspects of weather (i.e., visibility, winds, precipitation, cloud cover, temperature and humidity). Ensure both direct and indirect effects are covered.

■ **Analysis of other characteristics** - analyze all aspects of the environment that effect friendly or threat COAs not already incorporated into the terrain and weather analysis (i.e., logistics infrastructure, population demographics, economics, and politics). This is very important when analyzing the battlefield as it relates to a low intensity conflict (LIC) or operations other than war (OOTW) environment. For instance, population demographics will probably reveal more than a standard Modified Combined Obstacle Overlay (MCOO).

- Describe the effects on friendly and enemy capabilities and COAs.



3. Evaluate the threat. Update or create threat models - Depicts how threat forces prefer to conduct operations under ideal conditions. Ideally, this should be done before deployment.

- Convert threat doctrine into doctrinal template
- Describe the threat's tactics and options
- Identify high value targets
- Identify threat capabilities

4. Determine threat courses of action.

➤ ***Identify likely objectives and desired endstate for threat command one level above your own.*** As you identify likely objectives at each level of command, repeat the process for the next subordinate level, working down to two levels below you. In some cases, on a low-intensity battlefield for instance, S2s must go lower than that. Experience at the JRTC indicates



that battalion S2s must clearly explain to company commanders and battalion staff officers the mission and intent of elements as small as two- to three-man teams, when those teams play a significant role on the battlefield. Examples of such teams may be sniper teams seeking to delay defensive preparations; small teams reseeding minefields to disrupt logistical operations; and insurgent teams conducting reconnaissance and direct action missions to prepare the battlefield for attack by larger forces. In each case, the teams have a mission which can significantly affect the task force's success, and they, therefore, merit analysis and mention by the S2.



► **Identify a full set of COAs available.** Each threat COA should meet the following criteria: suitability, feasibility, acceptability, uniqueness, and consistency with doctrine. In most cases, the staff is not going to have time to develop COAs for all possible enemy actions. The S2 should focus the tactical decisionmaking process through situational templates that identify, as a minimum, the enemy's most likely and most dangerous courses of action.

► **Evaluate and prioritize each COA.** Identify strengths, weaknesses, center of gravity, and decisive points and compare to other COAs. Most forces will select the COA that takes advantages of the battlefield environment with the greatest number of advantages while reducing risk.

► **Develop each COA in detail.** Develop each COA based on METT-T. Each COA must cover: what (type of operation), when (time action will begin), where (sector, zone, axis of attack, avenue of approach and objectives), how (method by which the threat will employ his assets) and why (objective or end state desired). Each COA consists of a Situation Template, description of tactics and options and list of HVTs. Situational templates should show all enemy combat multipliers, for example, air defense artillery, chemical, artillery, aviation, and engineer.

► **Identify collection requirements.** Design your collection strategy to assist you in deciding what COA the enemy is opting to use. The collection strategy must support the commander's intent. The collection plan should concentrate on the *differences* between the named areas of interest (NAIs) and indicators of each COA. This helps the S2 use his limited collection assets to provide the most critical information. The NAIs, indicators, and time-phase lines (TPLs) form the basis of the event template, the guide for collection and R&S planning. The event template tells the S2 where to collect information and what indicators to look for to confirm or deny the situation template.

The key item to remember about the IPB process is that it is a continuous process. It is not a one-time effort. The staff must constantly analyze all events that occur and update IPB as necessary. If this is not done, the commander and staff develop and select a friendly COA that is based on bad assumptions. ☛



Section II

IPB AND THE DECISIONMAKING PROCESS

Commanders and staffs use the decisionmaking process to select a COA and develop an operations plan (OPLAN), operations order (OPORD), or fragmentary order (FRAGO) to implement that COA. The results and products of IPB are essential elements of the decisionmaking process. The major IPB effort occurs before and during the first of five steps in the decisionmaking process.

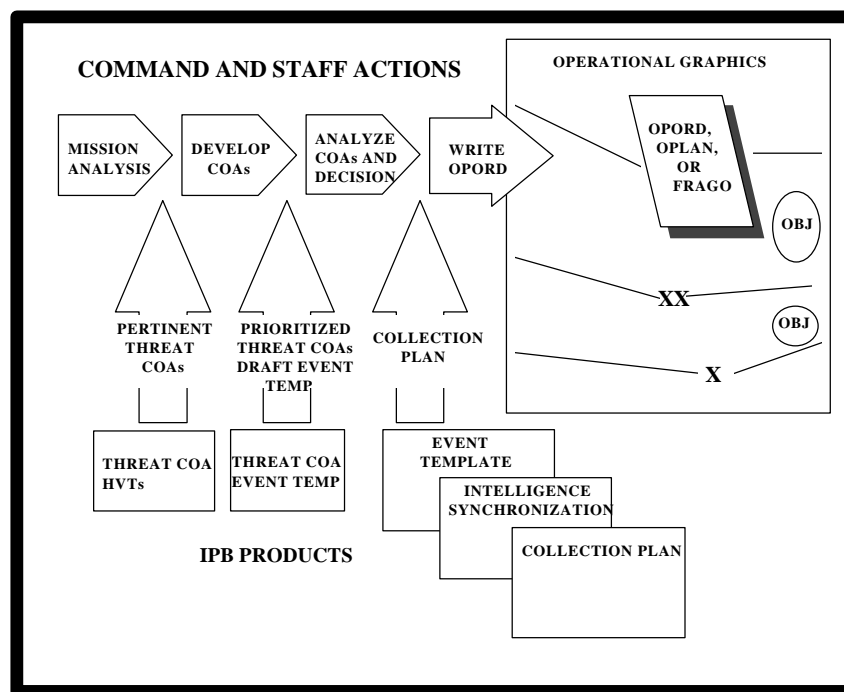


Figure 2-1. IPB and the Decisionmaking Process



MISSION ANALYSIS

During this step, IPB enables the commander to assess facts about the battlefield and make assumptions about how friendly and threat forces will interact on the battlefield. The description of the battlefield's effects identifies constraints and opportunities for potential friendly COAs. Threat evaluation provides detailed information on the threat's current disposition, recent activities, equipment, and organizational capabilities that the staff needs to complete their own staff estimates and planning. Enemy COA models developed in step four (Determine Threat COAs) of the IPB process provide a basis for formulating friendly COAs and complete the intelligence estimate. The IPB process identifies any critical gaps in the commander's knowledge of the battlefield environment or threat situation. As a part of his initial planning guidance, the commander uses these gaps as a guide to establish his initial intelligence requirements. For mission analysis, the S2 provides the pertinent threat COAs (multiple SITEmps) and HVT listing for each to prepare for the next step, Course of Action development.

OBSERVATION: S2 sections are not producing a complete Modified Combined Obstacle Overlay (MCOO) for terrain analysis.

DISCUSSION: S2s are not stressing the OCOKA factors while conducting terrain analysis. As a result, vital information from terrain analysis is not incorporated into the TDMP. S2s tend to omit many critical aspects of the terrain that have a significant impact on military operations. Enemy avenues of approach that lead into friendly sectors do not identify potential engagement areas, fire sacks, defensible terrain and specific system or equipment positions. Terrain analysis fails to identify where maneuver forces are most vulnerable to enemy observation and fires. As a result, the commander cannot see how the enemy will use terrain to his advantage or how he can deploy his (friendly) forces to take

advantage of the opportunities that the terrain presents.

LESSON(S): S2s should develop terrain analysis products before deployment. The S2 should coordinate with the Division Terrain Team for terrain analysis products. The terrain analysis product should cover the potential area of operation (AO) and area of interest (AI). Brigade and battalion S2s should also learn to share their products so the same products are not produced separately. The terrain product developed at home station should be a "generic" MCOO that focuses on cross-country mobility, avenues of approach, lines of communication, and obstacles. However, this "generic" MCOO is still incomplete. Once an exact Area of Operations is identified, the S2 can take his "generic" MCOO and refine it.



He can concentrate his efforts on that smaller piece of terrain that will effect his upcoming mission. The S2 can identify areas that are best suited for: potential engagement areas, battle positions, infiltration lanes, weapon system firing lines, and areas where friendly forces are vulnerable to enemy observation and fire. Finally, it is very important for the S2 to go out and observe the actual terrain to confirm or deny terrain products. A map terrain analysis can only be so good. This reconnaissance is very easy in the defense, but much more difficult in the offense.



OBSERVATION: S2s rarely develop complete threat models.

DISCUSSION: A threat model consists of three different items: doctrinal templates, description of threat tactics and options, and a list of high value targets (HVTs). In most threat models, the S2 omits the description of tactics and options as well as the HVTs. S2s should keep in mind that HVTs cannot be determined until the enemy mission is known. This may require the S2 to develop sets of HVTs for various enemy missions.

LESSON(S): S2s should develop valid threat models, using steps 1-3 of the IPB process before deployment. If the threat is known, then a doctrinal template and historical data will suffice. If the threat is new or unknown, the S2 may have to develop and update the threat model as

information becomes available. In many cases, this must be done in the field. This approach should save the S2 valuable time later on in the TDMP. Country studies are available for the combat training centers. These documents provide doctrinal templates for the threat. They also provide lengthy discussions on the tactics, doctrine and options that the threat will use. The country studies do not provide significant detail on HVTs (See Section V). However, the S2 needs to develop a useful tool using these resources. The S2 should develop his threat models (doctrinal templates, description of doctrine and tactics, and HVTs) on one overlay that can be used for mission analysis. With all of the possible options that the threat can pursue, the amount of work that this requires is extensive. However, the benefit is great. For contingency operations, the process is the same. The S2 should have a good idea of the possible contingency areas (should be stated in the unit mission letters) that his unit can be deployed. He should pursue the development of threat models in the same manner, starting with the most likely area and threat.

S2s can take this process one step further. The S2 can also develop situation templates at home station. If the three components of a threat model and the area of operations are known, S2s can develop possible combinations of situation templates for every mission before deployment, file them systematically, and retrieve them as needed during mission analysis.



It is also important for S2s to realize that the responsibility to develop threat models does not fall entirely on the shoulders of the S2. The division G2, which is better staffed and has more time available to accomplish this important analysis, should play a major role in developing these threat models. The S2 could refine these threat models as necessary.



OBSERVATION: S2s frequently do not produce multiple Situation Templates (SITEMPs) quickly with sufficient detail.

DISCUSSION: S2s habitually concentrate on only one SITEMP during the mission analysis portion of the TDMP. Occasionally S2s produce more than one SITEMP but only one is fully developed. By submitting only one serious SITEMP, S2s are not presenting the full range of enemy tactical options. SITEMPs produced by S2s are rarely complete. The SITEMPs usually lack the necessary detail to portray the full spectrum of enemy BOSs. They do not graphically portray all of the enemy's combat multipliers. Without an accurate depiction of how and when threat forces will deploy, friendly commanders have a difficult time calculating the necessary number and type of weapon systems to employ at critical points to achieve his intent.

LESSON(S): S2s should develop a full set of COAs available to the threat. However, due to most mission time

constraints, a minimum of two threat COAs, most probable and most dangerous, along with their associated situation templates must be developed. Experience at the CTCs has shown that most staffs have only enough time to wargame against one enemy COA, with consideration given to the most probable or most dangerous branches to that threat COA. Typically, the S2 will brief the Most Probable COA (MPCOA) and Most Dangerous COA (MDCOA) to the commander, who will direct the staff to plan against one or the other. Each enemy COA that is developed must address the following:

- Who? - what element
- What? - type of operation
- When? - time the action will begin
- Where? - the sectors, zones, axis of advance, avenue of approach, objectives
- How? - the method the enemy will use to employ his assets, (i.e., main effort, supporting effort, scheme of maneuver, fires, and support)
- Why? - the objective or endstate the enemy expects to achieve (Basically, a set of enemy maneuver graphics with the concept of the operation portion of the enemy's operations order, and a HVT list)

An enemy event template will greatly assist in deciding when the enemy will be entering the unit's battle space. S2s should attempt, with time permitting, to complete event templates in conjunction with SITEMPs.



An enemy event template must be produced on a separate overlay for each COA that depicts at least:

- Time-phase lines
- NAIs (associated with critical events)
- Avenues of approach

In most cases, the amount of time available determines how detailed these SITEMPS can be. With that in mind, the following techniques can help the S2 develop SITEMPS quickly:

- **Ensure that the threat models that were described earlier are developed at home station. This gives the S2 a large data base of possible enemy actions. If the S2 has done a good job with his threat models at home station, a SITEMP can be easily made by incorporating the threat model with the applicable battlefield conditions.**

- **The S2 should concentrate his efforts on the enemy's most probable and most dangerous courses of action. In the development of these COAs, the S2 should enlist (and the XO direct) the help of all staff officers. The staff officers should analyze their specific staff areas from a reverse BOS point of view. Many special staff members have some extra time during mission analysis. They could assist the S2 with his SITEMPS. An example of this would be for the engineer officer to assist in developing how the enemy would employ**

obstacle belts in the defense or the ADA officer providing information on how the threat would employ air assets. Staff integration with the S2 is discussed in more detail in Section VI.

- **The S2 can save time and materials by combining all threat model templates and the event template on a single overlay or a cartoon graphic. The trick is to color-code each COA to keep them separated from other COAs. The S2 should start with the most dangerous or most likely COA and develop each according to time available. Focus the event template on identifying the threat COA that the enemy adopts (focus on the differences in the COAs). The initial collection requirements can wait until after wargaming. Never take just one COA into the wargaming process; this is not the way to abbreviate the IPB process. The single product that results from this approach is vastly different from the complete set of products that was described earlier. However, this one product, when developed in quality detail, has repeatedly proven to be very effective for most units.**

- **Commanders and staffs should be aware that a "most" probable enemy COA may actually become the enemy's least likely option. For example, during the mission analysis brief for a friendly defense in sector, the S2 decides the enemy's most probable attack option is in the north part of the friendly sector.**



The IPB process drives a friendly COA which defends with a main effort in the north. Successful enemy reconnaissance sees the bulk of the engineer effort, especially obstacle work, occurring in the north. The enemy reconnaissance reports this information, their S2 assesses our main effort is in the north, and the enemy develops a plan to attack our weakness in the south. The enemy may have initially planned to attack north but decided against it once his reconnaissance confirmed our strength there. S2s must

consider this type scenario when briefing mission analysis and explain enemy options. In this way, commanders can build flexibility into the friendly plan.

- Finally, the S2 must have a trained intelligence section that understands the IPB and tactical decisionmaking processes. The S2 must use his section effectively if he wants to provide quality IPB products. An example timeline of how the S2 section can quickly produce multiple SITEmps and EVENTemps is provided at figure 2-2.



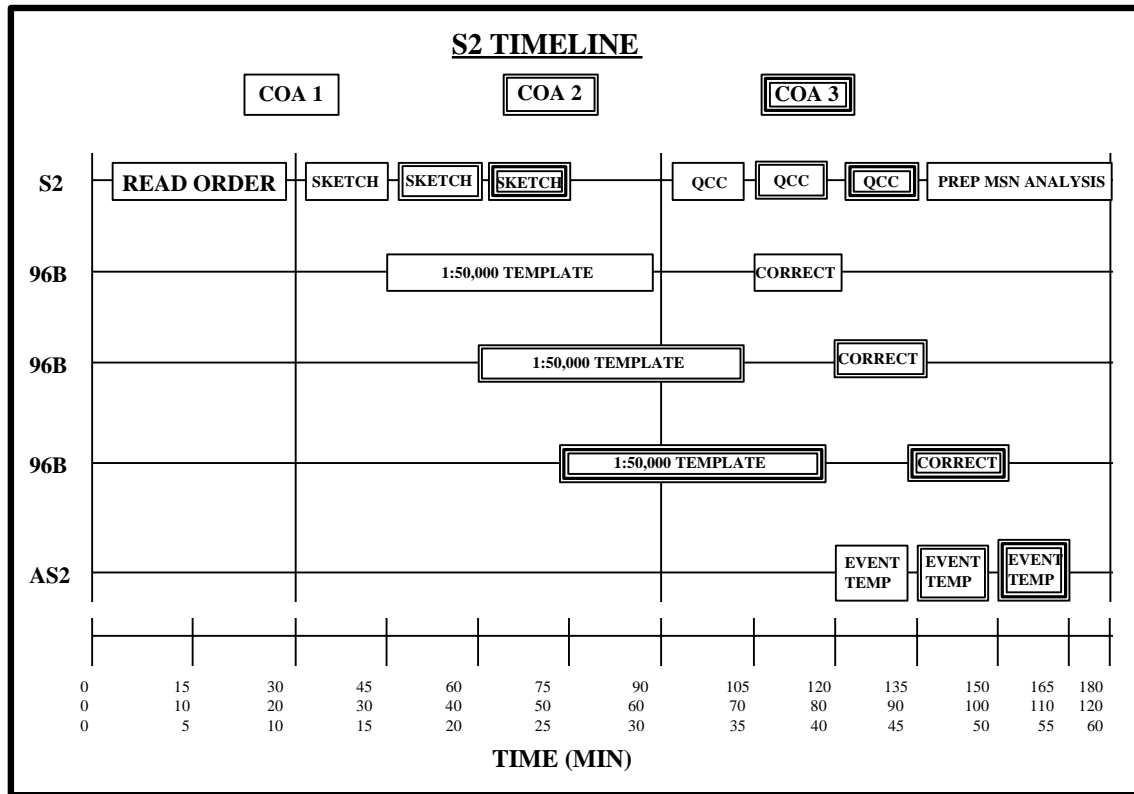


Figure 2-2. S2 Timeline for Development of Situation and Event Templates

(Commander's Guidance)

The commander usually gives some type of guidance after the mission analysis portion of the TDMP. This guidance varies from commander to commander. Some commanders provide very specific guidance while others provide only general guidance.

Frequently, the guidance only addresses maneuver. Commanders should give considerable thought to guidance for intelligence. The structure of his Priority Intelligence Requirements (PIRs) and Reconnaissance and Surveillance intent set the framework for all intelligence collection.



OBSERVATION: Commanders rarely give specific commander's guidance to the S2 after mission analysis.

DISCUSSION: Commander's guidance serves to focus the staff on the commander's intent, concept, and concerns about a mission. Often the commander omits specific guidance to the S2. Valuable time is wasted if the S2 does not completely understand the aspects of the enemy that the commander is most concerned about (initial PIR), commander's concept of deployment of R&S assets, commander's concept of target acquisition or the commander's intent to employ friendly assets so the S2 can anticipate intelligence support requirements. With a better understanding of the commander's intent, the S2 can fulfill his responsibility of recommending how to use limited intelligence assets to best defeat the enemy.

LESSON(S): Commander's should consider all of the requirements and time constraints that his staff is faced with. However, the IPB process drives the train for the TDMP. He should not overlook this. The S2 should ask questions to ensure that he understands the commander's intent and that he has all of the guidance necessary to continue mission planning. The S2 can ask certain questions that will allow him to get ahead in the IPB process. Some of these questions are:

● What are the initial concerns that the commander has about the enemy? This allows the S2 more time for the intelligence system to provide answers to these questions.

● What is the commander's concept for deploying R&S assets? This gives the S2 a better understanding of the assets that are available (including maneuver forces) that can be used to collect intelligence. It also helps the S2 understand how much time will be available to develop a R&S plan.

● What is the commander's concept of targeting? This allows the staff more time to identify possible High Payoff Targets (HPTs). It helps the staff understand the commander's intent on how he wants to fight the battle. It establishes how the commander wants to strike deep and attrite the threat or mass all of his firepower at one critical point. All this helps the staff mentally wargame the upcoming battle and prepare for COA analysis (wargaming).

● What is the commander's intent to employ his assets? This allows the S2 to anticipate intelligence support requirements. An example of this might be: If the commander wants to employ aircraft against a deep target, then the S2 should begin coordination for the electronic warfare support required to support Suppression of Enemy Air Defense (SEAD).



COA Development

The staff develops friendly COAs based on the SITEMP and the facts and assumptions identified during IPB and mission analysis. Incorporating the results of IPB into COA development ensures that each friendly COA takes advantage of the opportunities the environment and threat situation offer and ensures that each COA is realistic. During COA development, the S2 prioritizes the SITEMPs and drafts an event template, if it was not developed during mission analysis.

OBSERVATION: Often the enemy SITEMP is not used to develop COAs.

DISCUSSION: When the staff develops friendly COAs without using the SITEMP, the result is planning that is not being driven by the IPB process and COAs that do not take advantage of the enemy's weaknesses. Without using the enemy SITEMP, the analysis of relative combat power and the arraying of initial forces cannot be conducted to standard.

LESSON(S): During COA development, the staff must use the S2's SITEMP. The S2 must prepare products that support the entire staff's participation in this process. A 1:50,000-scale situation template does not allow the entire staff to adequately see the battlefield. A better method is a large, detailed, and accurate

sketch of the main battle area with the enemy SITEMP applied. This large sketch allows the entire staff to easily see and provide input to COA development. The sketch can be done by either an intelligence analyst or by another soldier that is available in the early stages of mission analysis. This large sketch can also be of use later in the wargaming process. Overlay material should be used over the sketch map so changes can be made to the various SITEMPs. An EVENTEMP is also very useful for COA development. It helps the staff understand the friendly options in relationship to time. Less, detailed sketches or "cartoons" can also be effective. These less, detailed methods can be used when not enough time is available to create a detailed sketch.



COA Analysis and Comparison (Wargaming)

During this phase, the S2 and S3 “fight” threat COAs, developed in step four of the IPB process, against potential friendly COAs. The remainder of the staff identifies support requirements to synchronize the battle. Ideally, all enemy COAs should be fought against all friendly COAs. Because experience at the CTCs shows it takes about two hours to fight one set of COAs, the commander should provide guidance on which COAs that he wants wargamed. Targeting follows or accompanies this session to develop the targeting concept for the operation. Based on the results of wargaming, for each potential COA, the staff:

- Constructs a decision support template (DST) and its associated synchronization matrix.
- Identifies supporting intelligence requirements.
- Refines the enemy COA models and event templates and matrices (if necessary), focusing on the intelligence required to execute the friendly COA.
- Confirms the enemy most dangerous threat COA.
- Refines the friendly COA, to include identifying the need for branches and sequels.
- Determines the probability of success of the friendly COA.
- Refines CCIR.
- Refines the reconnaissance and surveillance plan.

The result of wargaming each potential friendly COA against the set of enemy COA models allows the staff to make a recommendation on the best friendly COA. The S2's recommendation includes an evaluation of the intelligence system's ability to provide the intelligence needed to support each COA.

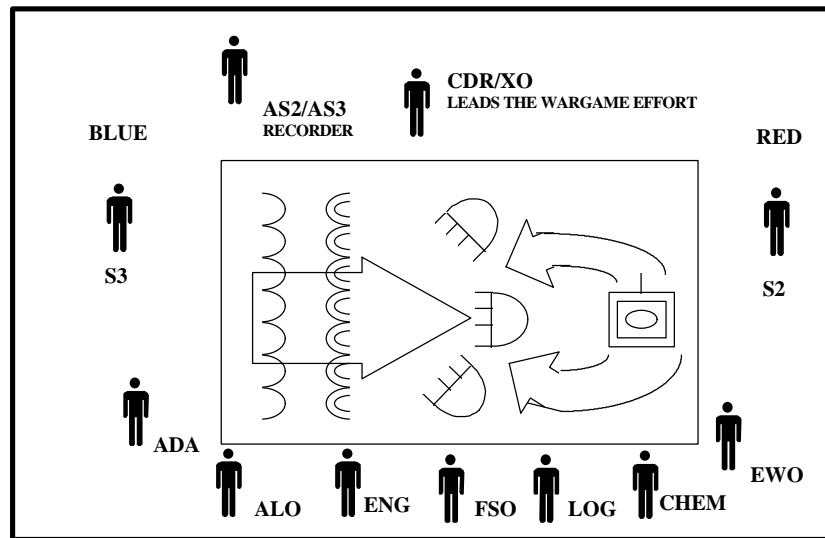


Figure 2-3. Wargaming

OBSERVATION: Frequently, S2s do not have all of the IPB products (intelligence tools) required to support the wargaming process.

DISCUSSION: There are many intelligence products that support the wargaming process. Situation and event templates portray how the enemy will employ and fight his forces. Having incomplete situation and event templates severely hampers the wargaming process.

In most cases, the event and situation templates are done on 1:50,000-scale overlays. If this technique is used, only two or three people can get close enough to the map to provide information to the process. However, for normal intelligence operations and battle-tracking purposes, the 1:50,000-scale situation and event template overlays are a must.



LESSON(S): The S2 must provide the appropriate intelligence products required to support the wargaming process. As a minimum, the S2 should have:

- A detailed MCOO - The MCOO should be prepared as described earlier in this newsletter.

- Situation templates - at least two, most dangerous and most likely enemy COAs should be developed. However the commander should provide guidance on the number of enemy COAs that should be prepared. The enemy situation templates should all be prepared in the same amount of detail and should ideally cover every BOS. Do not forget about the HVT list.

- Event template - Event template should contain all of the information that was described earlier in this newsletter. The event template also forms the basis of the Decision Support Template. During wargaming, the event template will be transformed into the DST. (See DST development portion of this newsletter.)

- A large, detailed, accurate sketch of the battlefield that is large enough for everyone participating in the wargaming session to see. The sketch should concentrate on the main battle areas or critical event areas that were identified earlier in the IPB process. Ensure that event and situation template overlays are prepared to support the large sketches.

- Any other useful intelligence products need to be available and posted. An example could be the commander's initial PIRs. A cross-check should be made in the wargaming process to determine if the PIRs are still valid and if there is a means to collect information to answer these PIRs.

OBSERVATION: Often, during the wargaming process, the S2 does not do an efficient job portraying the “uncooperative” enemy commander.

DISCUSSION: The S2 must portray a realistic enemy. This requires the S2 to be very knowledgeable on enemy tactics and doctrine at every echelon of the enemy's structure. In most cases, the S2 fails to consider some options or techniques that the enemy commander can use.

Wargaming sessions where S2s do a good job portraying the “uncooperative” enemy can usually be contributed to one of two factors. The first is when the S2 has extensive experience and is very knowledgeable of wargaming the enemy's actions. In most units, the S2 is usually the most junior officer on the staff and does not possess the knowledge base to do this effectively. If the S2 has these skills and experience, the S2 is fortunate. The second technique is when the S2 solicits the help of other staff members.

The leader directing the wargaming section needs to ensure all staff members offer their input. Often, wargaming is dominated by the S3.



At other times, the S3 and S2 dominate the session, with more junior officers and staff members left out.

LESSON(S): The technique that most S2s fail to use is asking other staff members for their help in portraying enemy actions. Before the wargaming session, the S2 should discuss how he thinks the enemy will fight the battle. He should seek out the experienced officers and NCOs in the command to see how they think the enemy will fight. The amount of information and insight that these senior officers can provide is very valuable to the S2. Each staff officer should be asked to analyze his specific staff areas from a reverse BOS point of view and provide that analysis to the S2. The S2 should discuss what he believes to be the enemy's concept of:

- Fire support with the Fire Support Officer
- Air defense asset utilization with the ADA officer
- Engineer asset utilization with the engineer officer
- NBC asset utilization with the NBC officer
- Close maneuver with the S3 or battle captains.

Another technique that is useful, if the information database is available, is for the S2 to study the background and personality of the enemy commander. The enemy commander's background or personality may provide key items that are very useful

to the S2 when determining how an enemy commander may fight. For instance, if an enemy commander has had extensive experience as a former reconnaissance commander at a lower level, then he may deploy reconnaissance assets more aggressively.

The key to the S2 becoming a good "uncooperative" enemy commander during the wargaming session is for the S2 to pull information from all available resources and understand the personality of the specific enemy commander.



OBSERVATION: Often, the S2 does not use the wargaming session to develop, refine and synchronize intelligence products. (Examples are: Collection management, R&S planning, and targeting.)

DISCUSSION: The wargaming session is one of the few opportunities for the S2 to coordinate intelligence synchronization. During the wargaming session, all staff sections are represented. The entire battle is fought, and all BOSs are incorporated into this wargame. The S2 should make every effort to use the wargaming process to support collection management, R&S planning and the targeting effort. Each of these topics is addressed in the wargaming process, but often the S2 fails to capture and synchronize these actions. As a result, these areas have to be addressed later when all staff sections may not be available.



LESSON(S): The S2 should make every effort to refine the R&S plan during the wargaming process. This may add some time to the wargaming process, but it saves time in the overall TDMP. It also ensures that the R&S plan supports the friendly COA. The S2 should bring an additional intelligence recorder to the wargaming session. The recorder should concentrate on only intelligence specific items. This intelligence recorder should be developing the R&S plan as the different COAs are wargamed. The wargaming process usually identifies where and when critical events take place on the battlefield (NAIs), who should be responsible for observing these NAIs (intelligence collector identified), and action that takes place at the NAI. The S2 provides information on how and what the intelligence collector is to report and the timeliness the information is required - (latest time of intelligence value), and the targeting concept, if any. With this information, the collection plan is 90-percent complete. The S2 also ensures that intelligence synchronization takes place by bringing up all of these topics during the wargaming process.



OBSERVATION: Often, during the wargaming process, the S2 does not keep a record of the battle damage assessment (BDA) of the enemy as the battle is fought.

DISCUSSION: Battle damage assessment is critical during the wargaming process. It helps to identify force ratios that are required to defeat the enemy at the critical points on the battlefield. BDA also helps identify weak areas of a COA, where force ratios do not favor the friendly commander. The portrayal of realistic BDA helps in the targeting process. Frequently, a COA is wargamed and the S2 assesses the projected BDA that the enemy would sustain for a critical point on the battlefield in order for a COA to be successful. If, during the execution of the mission, that BDA is not achieved, then it would be clear that the target needs to be reengaged until the required BDA was achieved.

LESSON(S): A technique that works for many S2s at the combat training centers is the development of a chart that lists weapon systems for enemy units. As the S2 and S3 wargame a battle and weapon systems are destroyed, the list is adjusted to reflect the new total. This helps the staff identify if a COA is feasible or if a COA needs to be refined by repositioning assets to achieve the firepower necessary to defeat the enemy. An example enemy BDA chart (for a motorized rifle battalion (BMR)), augmented with a tank company, is listed at figure 2-4. A similar chart can be developed for any enemy force. The S3 should develop a BDA chart for friendly forces.












<i>Unit</i>	<i>Weapon System</i>	<i>Number of Systems</i>
Company #1	BMP	13 
Company #2	BMP	13 
Company #3	BMP	13 
Company #4	T-80	13 
Battalion Assets	120-mm Mortar	8 
Regimental Assets (possibly in bn sector)	122-mm SP Howitzer (2S1)	18 
	SA-9/SA-13	4 
	ZSU 23-4/2S6	4 
	AT3/5 (BRDM-2)	9 

Figure 2-4. MRB (BMP) BDA Chart

Decision

During the decision briefing to the commander, the S2 should provide an evaluation of the intelligence system's ability to provide the intelligence needed to support each COA. The MI company commander should support the S2 by providing the technical expertise in employing MI company assets. Following the staff's recommendation, the commander decides upon a COA and issues implementing orders. As the commander approves a COA, he also approves the final list of intelligence requirements associated with that COA and identifies the most important as priority intelligence requirements (PIRs). The S2 then uses the commander's decision and the results of COA analysis to refine the collection plan to ensure that the PIRs are answered.

OBSERVATION: Often, during the decision briefing, S2s do not provide an in-depth evaluation of the intelligence system's ability to provide intelligence needed to support each COA.

DISCUSSION: During most COA decision briefings, the S2 states that "the

intelligence system can support each COA with the needed intelligence." This may be a true statement, but it does not give the commander a true picture of the intelligence collection (R&S) assets required to collect the necessary intelligence.



LESSON(S): S2s should use the intelligence system's ability evaluation to receive direction on the collection (R&S) plan. In this way, the commander understands what assets he has to devote to collect this information and if it fits into his overall intent. The S2 should also highlight the information that cannot be collected at the unit level (information that must be

provided by higher headquarters). With this technique, the commander understands exactly what information his unit can collect and what information he needs from higher. If there is critical information that can only be gathered by his higher headquarters, the commander can express his concern about this critical requirement with his higher headquarters commander.

Execution

As intelligence confirms or denies planning assumptions on the battlefield environment and the threat's COA, a continuous IPB process identifies new intelligence requirements. As the battle progresses, IPB is used to continuously evaluate the situation facing the command. If there are dramatic changes, a new iteration of the decisionmaking process may have to take place.

OBSERVATION: While initial IPB products are satisfactory, many intelligence sections fail to follow up on the process. As the situation changes and new information becomes available, S2s often fail to refine their products.

DISCUSSION: Examples are:

- Failure to update terrain by receiving, plotting, and disseminating LOCs or crossing points that were not initially identified on the maps.
- Failure to incorporate weather changes and their effects on terrain, as reflected in the modified combined obstacles overlay (MCOO).
- Failure to update the MCOO based on a ground reconnaissance.
- Failure to maintain incident overlays.
- Failure to update situation templates.

- Failure to update or refine PIRs which results in a failure to update the collection (R&S) plan.

LESSON(S): The S2 should update the IPB as the situation dictates. Most intelligence sections fail to do this because they have inadequate SOPs. Few personnel are knowledgeable of their responsibilities and, at times, requirements are not completed. CALL Newsletter 95-7, *Tactical Operations Center (TOC)*, outlines many good techniques for TOC responsibilities and staff drills.



OBSERVATION: Inadequate battle tracking by battalion S2s hinders predictive analysis.



DISCUSSION: Effective battle tracking is the key to predictive analysis. It allows the S2 to confirm previously developed templates and then make an accurate assessment of the enemy's next action or reaction. The key ingredient to battle tracking is receiving timely accurate reports. Many reports that come into the TOC are lost or not routed to the section that needs the information.

LESSON(S): Most cases of bad battle tracking can be attributed to two things: Inadequate reporting and information management. The section needs an SOP or Battle Drill for receiving, logging, plotting, and passing reports. The first thing that needs to be established by the S2 in regards to handling intelligence information is to decide how specific types of messages will be processed by the intelligence section. After identifying the different types of messages to be processed, determine who conducts the actions required. Refer to CALL Newsletter 95-7. Finally, the process must be practiced. Here are some tips that may assist in processing information.

- Use pre-printed message forms that automatically produce multiple copies.

- Have RTOs use headsets to help keep the noise level down in the TOC.

- Identify and prioritize critical information that must be tracked.

Ensure that all RTOs (not just in S2 section) understand what to do with this information once it is obtained.

- Develop a system to track the information determined to be critical. Use charts, matrices, or butcher board.

- Determine a system to track enemy and friendly units. Successful techniques include using color-coded cellophane stickers, and thumb tacks, or color-coded dot-type stickers. Ensure that all personnel understand and use the system.

- Do not let the entering of messages into a journal create a backlog in the information management system at the expense of posting maps, analysis, disseminating information, and receiving reports. A technique that helps is using a folder to maintain messages and then recording them in the journal as time allows.

- Ensure that the S2 map board is standardized with other map boards in the TOC. This ensures that overlays from one section can be easily and quickly transferred within other sections.

Techniques that help in receiving an accurate report.

- Ensure that all units use the SALUTE format. This format has proven itself reliable over time.



● Ensure that RTOs understand the necessity to receive a full report. Ensure that RTOs keep the collector on the line long enough to receive a full report. Sometimes the collector may have to call back with other needed information. Permit the RTO to do his job.

● Ensure that collectors report exactly what they saw. This takes practice and

SALUTE reporting should always be incorporated into every FTX.

● Ensure that PIRs are published in the operations order and understood by subordinate commanders. Ensure that specific reporting instructions are provided in the operations order to include negative reports. Often no contact, or nothing seen provides valuable information to the S2. ⚡





Section III

COMMANDER'S ROLE IN THE IPB PROCESS

We need to get "Commanders to understand Intel systems as well as they understand Operations." ----- GEN Dennis J. Reimer, Army Chief of Staff, 24 July 1995

FM 34-8, *Combat Commander's Handbook on Intelligence*, is the doctrinal reference for commander's participation in the intelligence process. This chapter will discuss techniques that the commander can use to ensure that the intelligence process is working in his unit.

The commander can win that major battle by generating combat power at the decisive time and place. Intelligence predicts when and where those decisive points will be. The commander's role in the intelligence cycle is to focus the intelligence capabilities of his unit. The commander's S2 goal is to provide the necessary intelligence the commander needs when it is required.

The commander focuses the intelligence effort with his priority intelligence requirements, targeting priorities, and priorities for other types of intelligence support, such as BDA or force protection. The commander must identify when he needs specific intelligence and when specific targets must be detected and attacked to support his concept of the operation. With the commander's PIRs, he focuses and synchronizes his intelligence collection assets on his specific needs and sets priorities for the intelligence processing and dissemination efforts.

OBSERVATION: Commander's PIRs can be vague and not specific.

DISCUSSION: An example of inadequate PIR is: "Will the enemy attack? If so, how when, where, and in what strength?" This PIR contains five different questions. This PIR is not specific to the mission or associated with a commander's decision. It only serves to confuse the collectors on the battlefield. The S2 should know more about the enemy situation than this PIR reflects. He should have a good idea, using IPB, that the

enemy might attack somehow, sometime, somewhere, and in some strength. As stated, intelligence collection assets may focus their effort to collect known information. The enemy can only select his action from a limited range of COAs due to the conditions of the battlefield. The S2 develops PIRs as a set of intelligence requirements (IRs) for each friendly COA during the wargaming process. The commander must identify the IRs that are critical to the accomplishment of the mission and these become his PIRs.



The wargaming process will identify which IRs are the most critical. The commander approves the PIRs when he approves the COA. The commander must restrict his PIR to only the critical IRs necessary to support the mission, because there are a limited number of collection assets available. If these assets are not used wisely, the “real” critical requirements may not be answered.

LESSON(S): A better PIR would be: Locate the 42d MRR’s main effort. This PIR focuses the intelligence collectors on a PIR that they can actually answer. Using

the event template developed during the wargaming process, the S2 can provide the collector with an area (Named Area of Interest - (NAI)) where the collector can concentrate his efforts. The S2 can also tell the intelligence collector exactly what he is to look for (indicators), exactly what he is to report (specific information requirements) and an approximate time that this event will occur.

The next portion of this chapter provides a checklist for the commander to ensure that his S2 is providing the IPB that is needed to support the decisionmaking process.

Mission Analysis

During this step, the S2 should provide the commander with all the intelligence information available so the commander can assess facts about the battlefield and make assumptions on how friendly and threat forces will interact. The S2 should provide products that support a full cycle of IPB:

- ☛ Terrain products showing key and decisive terrain, and their significance. Examples are Terrabase shots showing line of sight which may help to illuminate IV lines.
- ☛ A simple line and block chart showing the enemy, big to small.
- ☛ The enemy commander’s intent objective.
- ☛ Complete SITEMPs showing all enemy combat multipliers.
- ☛ Cause and effect sketches at critical events of the fight.
- ☛ Portrayal and discussion of what is known (targeting implications).
- ☛ Portrayal and discussion of what is not known (reconnaissance implications).
- ☛ Recommended PIR.
- ☛ Tentative reconnaissance concept.



LESSON(S): The commander should check to ensure the S2:

- Has the same perception as the commander of the upcoming mission.
- Knows all that the commander knows about the enemy situation.
- Was given initial guidance for intelligence and that he understands that initial guidance.
- Discusses the kinds of operations the battlefield will support.
- Is focusing IPB as per commander's guidance.
- Is developing situational templates according to commander's guidance.
- Has ranked the enemy threat models logically.
- Is following initial R&S guidance.

COA Development

During this step, the commander should be concerned about the options that he has available to him, given the battlefield environment.

LESSON(S): During this phase, the commander should ensure that:

- Each friendly COA is valid against enemy COAs.
- The staff understands each SITEMP.

- The S2 is developing indicators for each NAI as he develops the event template because this will be the basis of the R&S plan.

- The S2 has identified high value targets for each enemy COA.

- The S2 has developed an event template and event matrix.



COA Analysis (Wargaming)

LESSON(S): As the S2 plays the enemy commander during the wargaming process, the commander should ensure that:

- The S2 has logically presented probable enemy reactions to friendly maneuver and targeting.

- He agrees with the assets tasked by the S2 to collect the necessary information on NAIs and TAIs and that those assets do not have conflicting requirements.

- All IRs are linked to specific enemy actions or reactions that require a friendly response.

- The S2 has coordinated with the FSO to ensure that each planned or immediate target has an identified TAI associated with it and that the S2 has collection assets oriented on those targets to locate them, when and where you need them attacked.

- The S2 has collection assets in place to give the commander the BDA if it is required.

Recommendation

LESSON(S): During the staff's recommendation, the commander ensures that the:

- S2 has identified the set of IRs that support that COA.

- S2 has identified the latest time of intelligence value for the information requirements.

- PIRs and IRs are the concerns that the commander has about the enemy.

- Recommended PIRs are clear and distinct.



Decision

LESSON(S): Once the commander chooses a COA, he ensures that:

- He approves the PIR or adjusts them to meet his needs.
- He understands the requirements necessary to answer his intelligence requirements.
- The staff has all DPs, NAIs, and TAIs covered by collection assets and that the

commanders of these collection assets understand their missions.

- The S2 understands the targeting concept and has collection assets devoted to TAIs that need BDA.
- The S2 has considered all available collection assets for the R&S plan.
- The intelligence synchronization matrix provides the information that is required when it is needed and that it supports the targeting effort.

Execution

LESSON(S): During the execution of the actual mission, ensure that the S2 is:

- Tracking the battle and upcoming IRs.
- Ensuring intelligence collectors are meeting intelligence taskings.
- Redirecting collection assets after PIRs are answered.
- Confirming or denying existing situation templates quickly.

● Disseminating intelligence to the units that need it.

- Informing the commander of potential new enemy actions not anticipated during wargaming.
- Providing intelligence based on analysis and not just relying on combat information.
- Providing the commander information so that the commander can make decisions.☺



Section IV

IPB AND COLLECTION MANAGEMENT

Doctrinal Overview

Regardless of the echelon, there are five steps or phases to the collection management process. At the maneuver brigade and battalion levels, the S2 section performs the collection management function. The five phases are:

- Receive and analyze requirements. (Identifying what the commander must know about the enemy, weather, and terrain to accomplish the mission. Normally they are expressed as PIRs or IRs.)
- Determine resource availability and capability. (What means the unit has to look for the specific item developed in step one.)
- Task resources. (Tell the collector what it should look for, when to look for it, and how to report information.)
- Evaluate reporting. (Is the asset accurately reporting what it sees based on its capabilities? And does the report answer the original question?)
- Update collection planning. (Redirect assets as necessary to answer requirements.)

This chapter primarily deals with the first phase (receive and analyze requirements) of the collection management process. IPB is useful to develop these requirements. **FM 34-2, *Collection Management and Synchronization Planning***, covers the entire collection management process in detail.

The primary purpose of collection management is to answer the commander's IRs while making the best use of scarce intelligence collection resources. The secondary purpose is to answer IRs of other intelligence users. The commander's IRs provide the information necessary to execute the selected course of action and carry out his targeting strategy. IPB helps the commander identify his IRs and provides the focus and direction needed to satisfy them.



Mission Analysis

The commander bases his initial IRs on the critical gaps in the command's knowledge of threat forces, the battlefield environment, and its effects on potential COAs. Based on the commander's guidance, some gaps become the S2's initial priorities for intelligence collection. Mission analysis also produces a set of threat COA models. The significance differences between these COAs are the basis of the initial event template and its supporting matrix. The S2 uses this initial event template and matrix to focus his collection efforts to identify the COA the threat will adopt.

COA Development

During COA development, the S2 needs to begin the task of determining the collection assets that are available to him.

Analyze and Compare COAs (Wargaming)

During the staff's "fight" of the enemy and friendly COAs, the staff identifies areas (named areas of interest (NAIs)) where intelligence confirms enemy activities or other key events. This allows the S2 to program collection assets against a particular NAI at a specific time. During wargaming, the commander may discover that he needs to make a decision based on the intelligence from a NAI. That NAI becomes a decision point (DP) or creates a DP related to that NAI. The information required to make that decision becomes an intelligence requirement and is added to the list of proposed IRs for that particular COA. The targeting process uses many decision points developed during wargaming. Because of wargaming, the S2 has identified all IRs needed to support his collection strategy. He develops and depicts these strategies for potential friendly COAs using an intelligence synchronization matrix and a collection plan.

Decision

Following the staffs' recommendations, the commander decides upon a COA that fits the needs of the unit. He also approves the list of IRs associated with that COA developed before and during wargaming. He then identifies the most important as priority intelligence requirements (PIRs).



Execution

As the unit executes the selected COA, the S2 executes the collection plan. The S2 focuses collection assets on the proper intelligence requirement at each stage of the operation. He receives the information it produces, processes it, and then produces and disseminates intelligence of value to the commander in time to support the mission. During execution, the S2 monitors both current operations and the intelligence situation. He maintains contact with his asset managers to ensure effective cross-cuing and retasking of collection assets. This allows the S2 to take advantage of presented opportunities, avoid surprise, and keep intelligence synchronized with the command's operation.

Intelligence Synchronization

Intelligence synchronization is the process that ensures the intelligence system provides answers to IRs in time to influence the decision they support. The S2 develops specific orders (from higher commands) and requests (from subordinate and adjacent commands) (SOR) sets that synchronize the activities of the intelligence collectors with specific information requirements. He ensures that:

- A set of SORs supports all requirements.
- The collection and reporting timelines deliver intelligence in time to influence each decision.
- He plans and allocates time for collection, processing, and dissemination.

The S2 (collection manager) is the key to intelligence synchronization. He checks to ensure that all decisions identified during COA development are supported one for one by intelligence requirements. He then manages the collection management process to ensure that:

- Collection supports all intelligence requirements.
- All SORs support some intelligence requirements.
- Collection strategies are properly “backwards planned” to ensure timely receipt of intelligence.
- Collectors and processors have dissemination guidelines.
- Collectors execute the strategies within the timelines each IR dictates.



Successful synchronization provides critical intelligence in a timely manner that influences battlefield decisions. Failure to synchronize intelligence results in

- Decisions made without the benefit of intelligence.
- Collection against IRs no longer valid.
- Collection of intelligence that will not influence the COA.
- Under or over-used collection systems.

R&S Planning and IPB

Experience at the combat training centers has proven the importance of R&S planning. Gaining and maintaining contact with the enemy is essential in winning the battle. With a good picture of the enemy, the commander can gauge the intentions of the enemy, anticipate the enemy's actions, and mass his combat power to defeat him. IPB plays a major role in R&S planning.

The two principles of R&S are to tell the commanders what they need to know in time for them to act and do as much as possible ahead of time. The R&S plan should directly address what the commander wants to know. It is command-oriented and command-directed. The commander focuses his R&S effort with his PIRs. PIRs cover the critical information gaps that the commander needs to accomplish his mission. The IPB process provides the best method to analyze the battlefield environment. With IPB playing such a critical part in R&S planning, it is easy to understand the second principle of R&S, do as much as possible ahead of time. As discussed earlier in this publication, the IPB process is very time consuming and much of this process can be done at home station.

The IPB process provides the framework for the R&S effort. Of all IPB products, the event template is the most important product for R&S planning. The event template allows the S2 to confirm or deny the situation templates, gauge enemy and friendly rates of movement, compare rates of movement between mobility corridors and avenues of approach, and cue other collection assets based on friendly and enemy movement. The associated event analysis matrix is also used to analyze specific events. The S2 uses this to find out when and where events will take place on the battlefield. The DST developed during the wargaming process is also important to R&S planning. The R&S plan must support the DST.

OBSERVATION: S2s are failing to tie the IPB process into the R&S planning process.

DISCUSSION: TF commanders and S3s “delegate” the responsibility for planning, integrating and supervising the reconnaissance

effort to the S2. Most S2s develop R&S plans without integrating other staff elements before the staff issues the OPORD.



The chances that R&S assets will be ineffectively employed increase dramatically when the S2 fails to integrate the collection plan with the S3's maneuver COAs before the commander's decision brief. The result is a failed reconnaissance effort that partially covers NAIs, which hampers the staff's ability to determine threat weakness or strength and then exploit threat weakness.

LESSON(S): FM 34-2-1, *Reconnaissance and Surveillance and Intelligence Support to Counter-Reconnaissance*, is the doctrinal reference for R&S planning. TF commanders, XO's, and S3's should drive the R&S plan development with the S2. The staff should

develop the R&S plan similar to an OPORD. In this way, the staff integrates and synchronizes the plan. Early in the staff planning process, identify PIRs, develop SIRs, and then list indicators for each NAI. The R&S plan should not only answer the Specific Information Requirements (SIRs) but should also support the commander's plan of maneuver. The R&S plan should be in both written and graphic form to task assets in the OPORD. Ensure that subordinate commanders are held accountable for their NAIs. This allows the S2 time to analyze reconnaissance results and redirect collection assets as necessary.

Developing the R&S Plan

The S2 is responsible for driving the R&S effort. The first step deals with receiving the unit's mission. As the S2 analyzes the mission, he identifies intelligence gaps that he must answer for the commander to accomplish that mission. The critical intelligence gaps become the commander's PIR. These PIR, along with other IRs provide the focus for R&S planning. The R&S plan should answer these requirements. The S2 has to translate the initial PIR and IR into indicators on which R&S assets can collect. The S2 then identifies the specific information requirements (SIR) and specific orders and requests (SOR) for the R&S plan. The SIR and SOR ensure that assets are collecting specific information that answers the PIR and IR. The S2 then compares the SIR to the event template. This tells the S2 where and when to position friendly collection assets. The S2 positions collection assets on these areas and they become named areas of interest (NAIs). The S2 then prioritizes the SIR. He should concentrate his collection effort on the SIR that provide the greatest amount of intelligence in the shortest amount of time. The next step is to identify the collectors that are available and can collect the information. The final step is to task the collector to conduct the mission. The S2, with the S3, should task assets to ensure that the assets are available and that the total R&S effort supports the unit mission.

OBSERVATION: The staff often fails to support their R&S assets with essential information and plans necessary to succeed during training and combat operations.

DISCUSSION: The failure to support a unit's R&S assets can significantly degrade a unit's ability to successfully accomplish its assigned mission. There are numerous reasons why this may occur. However, two factors are often observed at the combat training centers.



The first is late and inadequately planned R&S operations by the staff. The second is the late deployment of collection assets.

The main problem appears to be the inability of the staff to plan and coordinate a timely R&S effort while going through the tactical decisionmaking process. Commanders and S3s recognize the need to get collection assets out early, but fail to ensure timely and complete instructions are given to them to facilitate employment. During most cases, the R&S plan is developed in a vacuum, with limited input from the entire staff. Many units delay their collection asset deployment until after the unit's operations order. This should be avoided at all costs. Collection assets should be employed early enough to allow them time to provide battlefield information. This allows the staff time to adjust and refine the scheme of maneuver prior to the execution of the mission. Late deployment of forces as collection assets usually increases the risk of chance contact with the enemy.

LESSON(S): Some recommended solutions to this problem are: the appointment of a Chief of Reconnaissance to manage the entire R&S effort, empowered with decisionmaking authority during execution; the establishment of an R&S operations planning cell, the development of a standard list of collection asset information and plans required prior to deployment, and additional training for collection assets on the IPB and METT-T process. These techniques and procedures can significantly reduce the time spent planning and preparing a collection asset for mission deployment.

A unit may consider the development of an R&S operation planning cell. This could be difficult at the battalion level due to manning.

This cell would consist primarily of trained NCOs performing an additional function in support of the R&S mission. Often, primary staff officers are involved in planning current operations and are not available to focus on R&S planning. The emphasis of the NCOs would be the following five battlefield operating systems: intelligence, maneuver, fire support, combat service support, and command and control. The recommended composition of this planning cell would be the operations NCO, fire support NCO, S2 NCO, communications NCO, S4 NCO, and any specific collection asset leader (scout platoon leader, scout platoon sergeant, LLVI section leader, GSR squad leader, or REMBASS team leader). These NCOs would gather as soon as the higher headquarters issues the warning order. They would begin to develop the plan necessary to support collection asset deployment. The executive officer and LOs should assist in the process to ensure adequate coordination and timely operations planning occurs. The planning cell would consider only the critical aspects of the R&S operation. A suggested list of required information and plans is as follows:

- Most current S2 SITEMP (S2 NCO)
- Unit's mission statement (S3 NCO)
- R&S collection asset's mission statement (S3 NCO/S2 NCO/specific collection asset leader)
- Commander's Intent (Commander through the S3 NCO)
- Initial NAIs, PIR, and SIR (S2 NCO)
- Hasty fire support plan, target list, NFAs and SEAD plan (FSNCO)
- Casualty evacuation plan (S4 NCO)
- Transportation plan (S3 NCO/S4 NCO)



- Resupply plan (S4 NCO)
- Long range communications plan (S3 NCO/S2 NCO/Commo NCO)

Most of the information listed above is identified during the mission analysis phase of the TDMP. The NCO's function would be to assist the staff officer in conducting mission analysis, but to pay particular attention to those issues that affect the R&S effort. Upon completion of mission analysis, the commander provides guidance to the staff. He should also provide specific guidance to focus the efforts of R&S planning. The R&S planning cell then refines, coordinates, and assists the collection assets in preparing for their missions. Once the staff completes and refines the overall plan, changes can be sent to collection assets by FM radio.

Units can become more effective by increasing the training and experience level of their collection assets. This can be done through leader development seminars on IPB and METT-T analysis, practical exercises involving collection assets and a trained OPFOR, and individual threat doctrine study. With this additional training, collection asset leaders can more effectively plan their observation post locations, routes, and determine areas where contact with the enemy is likely.

An improved planning process for intelligence collection assets will result in a

more timely R&S plan and collection asset deployment. A unit cannot afford to delay the deployment of their valuable intelligence collection assets.



OBSERVATION: Many intelligence personnel do not understand the capabilities and limitations of their R&S assets.

DISCUSSION: All personnel in intelligence sections need to understand all aspects of the intelligence collection systems available to them. This requires all intelligence personnel to understand the capabilities of the MI assets found in the MI battalion, the capabilities of the scouts, and of other assets available to them. They need to understand exactly how they can use these assets in the R&S plan.

LESSON(S): Unit staffs need to practice developing R&S plans. During every FTX, MI battalion assets should be incorporated into training scenarios to help the staff understand their employment. The S2 should also work closely with the scout platoon to ensure that he understands all of their capabilities. The S2 should be aware of all collection assets to include maneuver assets (infantry, armor, aviation, engineers, and others) A checklist of intelligence collection assets (Bde level and below) is available in figure 4-1.



System	Capability
1. Scout platoon	HUMINT. Surveillance, reconnaissance, target acquisition, battle damage assessment.
2. AN PPS-15A(V)1 GSR	Moving Target Indicator. Range: 1.5km-personnel, 3km-vehicles
3. AN PPS-5B GSR	Moving Target Indicator. Range: 6km-personnel, 10km-vehicles
4. GSQ 187 REMBASS Remotely Monitored Battlefield Sensor System	Seismic/acoustic, magnetic, and passive infrared monitoring and detection sensors
5. AN/PRD10/11/12 Receiving Set	COMINT. HF/VHF/UHF intercept. VHF DF when netted
6. AN/TRQ-32(V)2 Receiving Set (TEAMMATE)	COMINT. HF/VHF/UHF intercept. VHF DF when netted
7. AN/TLQ-17 (Traffic Jam)	COMINT. Jammer. 1.5-80MHZ
8. Hand-Emplaced Expendable Jammer (HEXJAM)	COMINT. Hand emplaced jammer. 1km range. 20-90 MHZ.
9. LRSU	HUMINT. Surveillance, reconnaissance, target acquisition, battle damage assessment.
10. Interrogator	HUMINT. Question source to obtain maximum amount of information in order to satisfy intelligence requirements. Screen and exploit captured enemy documents.
11. CI Team	HUMINT. Conduct operations in order to identify, exploit, and neutralize CI targets and aid in force protection.
12. FO/Colt Team	HUMINT. Surveillance, target acquisition, battle damage assessment.
13. Maneuver Assets Infantry Aviation Engineers ADA Armor	HUMINT. Surveillance, reconnaissance, target acquisition, battle damage assessment.

Figure 4-1. Intelligence Collection Assets



OBSERVATION: Often, S2s and S3s do not know the locations of all intelligence collection assets on the battlefield.

DISCUSSION: In many units, the S2 develops the R&S plan by himself. The S2 tasks units to collect information in the intelligence annex portion of the operations order. As a result, the S3 never really knows exactly where these units are located. Because of this, it is difficult to clear fires because of fear of fratricide. Or worse, friendly units fire on the targets and collection assets are lost due to friendly fire.

LESSON(S): The S2 and S3 should work closely together in the R&S effort. Both the S2 and the S3 should track the locations of these collection assets. The S3 should task these units in the tasks to subordinate units (S3s) portion of the operations order. The S2 should also ensure that, as he updates his R&S plan, retasking units, he passes the new locations of intelligence collectors to the S3 and FSO. A technique to track collection assets is to use butcher board or charts to depict locations of these units. The chart should be visible to everyone in the TOC to facilitate operations. This is especially critical for the FSO to see to clear fires.

OBSERVATION: Many units do not have a clear SOP established to task R&S assets.

DISCUSSION: The S3 is responsible for, and has tasking authority over, maneuver elements. The S2 makes recommendations to the commander or S3. The S2 is usually the prime user of most intelligence collection assets within a unit and, in many units, actually tasks them. However, this should only be done after the R&S plan is approved by the commander and S3. Every unit should establish an SOP to determine who tasks R&S assets. Frequently, the S3 does not have time to prepare and publish separate R&S missions. It is then completed by the S2. The next problem that many units experience is where to place the R&S tasking in the operations order. There are three places in the operations order that R&S taskings can be placed. The first is “tasks to subordinate units” in paragraph three of the main order (Figure 4-2). The second is “intelligence acquisition tasks” in paragraph three of the intelligence annex (Figure 4-3). The final place is in the Specific Orders and Requests (SORs) of the R&S matrix. Placing R&S taskings in either place has its drawbacks. Subordinate maneuver units tend to concentrate on only their subordinate unit instruction portion of the main order. If R&S tasks were assigned to a subordinate maneuver unit in the intelligence annex, the subordinate unit may overlook the R&S tasking. Subordinate intelligence units usually look to the intelligence annex for their R&S missions. These units could easily overlook R&S taskings in the main order.



OPORD 22 1st Bde - 18th IN DIV...

3. Subordinate Unit Instructions.

A. TF 1-8:

(1) Defend in sector from GH536794 to GH532618 NLT 172100U SEP 95.

(2) Establish surveillance sites NLT 170400U SEP 95 to confirm or deny enemy activity vicinity NAI 14 and NAI 16. Refer to R&S tasking matrix for specific instructions.

Figure 4-2. R&S Tasking in Subordinate Unit Instructions.

ANNEX B (Intelligence) to OPOD 22 1st Bde - 18 IN DIV...

3. Intelligence Acquisition Tasks.

A. TF 1-8:

(1) Establish surveillance sites NLT 170400U SEP 95 to confirm or deny enemy activity vicinity NAI 14 and NAI 16. Refer to R&S Tasking matrix for specific instructions.

Figure 4-3. R&S Tasking in Intelligence Acquisition Tasks.

LESSON(S): The first requirement that a unit must establish is who has tasking authority over R&S assets. The best approach is for the S3 to maintain tasking authority over all assets. In this approach, the S3 ensures that the R&S plan supports the overall mission. He also ensures that the R&S plan receives complete staff attention. With the S3 controlling the R&S assets, he also can maintain control of all collection asset locations. However, the S2 should play a major role in planning the R&S plan and recommending how best to employ R&S assets. This should be established in the unit SOP.

The next requirement a unit needs to do is to establish where R&S taskings are to be placed in

the operations order. The unit should establish an SOP that provides this information. However, different units may augment a unit at any given time. Therefore, R&S taskings should be placed in both of the paragraphs that are mentioned above. In this way, R&S taskings are not overlooked. This also ensures that subordinate units understand the importance of the R&S missions because they are given more command emphasis.

A third method that was presented earlier was the formation of the R&S planning cell. If the R&S planning cell method is used, a separate warning order and frago is issued in lieu of the main operations order. However, the main order should still contain the R&S taskings. ☛



Section V

IPB AND THE TARGETING PROCESS

Decide-detect(track)-deliver(assess) characterizes the targeting methodology. First, the commander decides what parts of the enemy force to attack, to what effect, and generally where, when and by what means. Second, the S2 uses the IPB process to assist in determining where to place assets to detect and track these targets so they can be engaged. Third, the commander selects the combat power to deliver that will achieve the desired effects on the target.

DECIDE

IPB provides information which influences the target development process. During mission analysis, the IPB effort produces doctrinal templates and threat models that identify potential high value targets (HVTs). High value targets are those assets that the enemy commander requires for the successful completion of his mission. The S2 develops an initial HVT list as he mentally wargames through the operation of how the threat will use his assets to support threat actions. The S2 identifies the key assets required in executing the primary threat mission. There are 13 categories used to develop target sets. They are:

- ***Command, control, and communications (C³)*** - These are targets that affect maneuver or combined arms C³. Examples include regimental, divisional, and army command posts and traffic control points.

- ***Fire support*** - This covers the entire threat fire support system. Subsets include fire support command and control, weapons, target acquisition, and ammunition. Weapons include cannons, guns, missiles, and fixed- and rotary-wing aircraft.

- ***Maneuver*** - These are maneuver tactical subunits in various postures. They are motorized rifle and tank companies, assembly areas, march columns, and advanced guard units.

- ***Air Defense*** - This category covers the threat's air defense system. It includes missile unit headquarters and processing centers, radar sites and short-range air defense platoons.

- ***Engineer*** - All engineer-type targets. Examples include bridging, ferry units, crossing sites, snorkeling sites, and movement support elements.



- ***NBC*** - This category covers NBC support elements and major weapon firing positions.
- ***Reconnaissance, intelligence, surveillance, and target acquisition.(RISTA)*** -Targets in this category include ground surveillance radars, reconnaissance patrols, and airborne sensor systems.
- ***Radio electronic combat (REC)*** - Some target acquisition assets are listed here instead of the RISTA category. REC targets include jammers and radio and radar direction-finding stations.
- ***Bulk fuels (Class III POL)*** - This can be a critical category because of the level of mechanization of some threat forces and the projected rates of advance for second-echelon forces. Targets include transport and pipeline units and POL points.
- ***Ammunition storage sites and distribution points (Class V Ammo)***- Refers to ammunition support targets.
- ***Maintenance and repair units (Class IX Maintenance)*** -Targets include regimental maintenance units, vehicle collection points, and mobile repair facilities.
- ***Lift*** - This category refers to general transport units. Special consideration should be given to heliborne transport.
- ***Lines of communication (LOCs)*** -No special target types are designated in this category. However, any target that would interfere with ground or air LOC can be a target. Examples include bridges, airfields and railheads.



D I S R U P T Y	D E L A Y	L I M I T	TARGET SET	RELATIVE WORTH
X			C3	<div></div>
X	X		FS	<div></div>
X	X	X	MANEUVER	<div></div>
			ADA	<div></div>
			ENGINEER	<div></div>
X		X	RISTA	<div></div>
			REC	<div></div>
			NBC	<div></div>
X	X		BULK FUELS	<div></div>
			AMMO	<div></div>
			MAINTENANCE	<div></div>
X			LIFT	<div></div>
X			LOC	<div></div>

Figure 5-1. Target Relative Value Matrix

The S2 then rank-orders the HVTs regarding their relative worth to the threat's operation and records them as part of the threat model. When fully developed, HVT evaluations take the form of a target relative value matrix (Figure 5-1). The first three columns (disrupt, delay, and limit) should not be confused with attack guidance terms. An “X” in the Disrupt column indicates that considerable benefit can be gained by attacking a target with a goal of disrupting its function. An “X” in the Delay column indicates that a benefit can be gained by attacking a target to delay its arrival on the battlefield. An “X” in the Limit column indicates that a benefit can be gained if the target approach is limited.



OBSERVATION: During mission analysis, S2s are not identifying possible locations of High Value Targets (HVTs) when they develop situational templates.

DISCUSSION: S2s are not identifying all HVTs associated with an enemy COA and producing a situation template that reflects the locations of these HVTs as they would appear on the battlefield. As a result, S2s are struggling to provide nominations for High Payoff Targets (HPTs). S2s need to evaluate each HVT to decide if they should nominate it as a potential HPT. This will allow the staff to determine if the targets are in range of friendly fire systems and what is the priority to interdict those targets. The S2 should list each HVT, by category on each SITEMP, and discuss them during course of action wargaming. The driving factor that forces S2s to forget about HVTs is time. S2s frequently fail to produce good threat doctrinal templates with HVTs listed back at home station. As a result, the HVTs are overlooked. The S2 should work very closely with the FSO when the FSO develops target sheets for the threat. There are currently 128 target sheets developed for

Warsaw Pact forces. These sheets should be used as a base when developing target sheets for the unit's threat. These 128 sheets are located in Chapter 3 of the Fire Support Mission Area Analysis (FSMAA). These target sheets should also be developed at home station prior to deployment.

LESSON(S): A technique that S2s can use is to develop doctrinal templates with HVTs listed at home station. Once the unit receives a mission, the S2 can extract the doctrinal templates with a list of associated HVTs. The S2 can then easily develop situation templates with associated HVTs. An example of a HVT list for a MRR is located at figure 5-2. Again, S2s should not be the primary source of these doctrinal templates. Typically, a battalion or brigade S2 is an inexperienced analyst, with a limited understanding of the sources available from which to derive these templates. As mentioned earlier, the time required to produce these products probably is more than S2s have available.



Category	High Value Target
Command, Control and Communications	MRR Main CP MRR Forward CP MRR Rear CP MRB Main CP/COP Tank Bn Main CP/COP Retrans Site
Fire Support	RAG COP BN FDC (SP) BN COP Battlefield Surveillance Radar Site (Small Fred) Artillery Battery Firing Positions Mortar Battery Firing Positions
Maneuver	Advance Guard Battalion Advance Detachment Accompanying Artillery Motorized Rifle Company (Reinforced) Tank Company (Reinforced) Tactical March Column Bn Assembly Area
ADA	SA 9/13 Plt. ZSU 23-4/2S6 Plt. SA-14 Team
Engineer	Bridge Plt. Mine Warfare Plt.
RISTA	Battlefield Surveillance Radar (Tall Mike) Regimental Recon Patrol, Recon Company
REC	
NBC	Chem Recon Sqd. Vehicle Decon Sqd.
Bulk Fuels	POL Plt.
Ammo	Ammo and Cargo Plt
Maintenance	Supply and Maintenance Section
Lift	
LOC	Radio Plt Wire and Telephone Plt

Figure 5-2. High Value Target List (MRR)



As part of COA analysis and comparison, or immediately after, the staff generally starts the targeting process with a targeting conference. Using the results of staff wargaming (situation, event, and decision support templates) and IPB as a guide, the staff decides which HVT will become a HPT. The key to HPTs is that they are based on the friendly concept of the operation and support the friendly force commander's scheme of maneuver. In addition, the targeting group decides:

- What targets to acquire and attack HPTs.
- What target selection standards (accuracy and timeliness) to use.
- Where and when these targets will likely be found (named area of interest (NAI) and targeted area of interest (TAI)).
- How to attack the targets, based on the commander's targeting concept.
- Whether battle damage assessment (BDA) on each target is required to support the commander's intent or the command's COA, and how detailed it must be.
- What collection asset will be used to detect and track the target.

OBSERVATION: Frequently, targeting is not included as a part of either wargaming or building a synchronization matrix.

DISCUSSION: There appears to be a problem with the targeting process in that there is no doctrine published for when targeting is supposed to be conducted or where it fits into the tactical decisionmaking process (TDMP). The doctrine for the planning process, formally addressed in **FM 101-5, *Command and Control for Commanders and Staff***, and informally addressed in **CGSC ST 100-9**, does not show how targeting fits into the sequence of producing an order or controlling combat operations. However, **FM 6-20-10, *Tactics, Techniques and Procedures for the Targeting Process***, states that "targeting is an integral part of the planning process." Targeting doctrine states that "Targeting is the process of identifying enemy targets for possible

engagement and determining the appropriate attack system too be used to capture, destroy, degrade or neutralize the target in question." In essence, this sounds like the commander's intent. For this reason, it would appear that the TDMP is appropriate for targeting.

LESSON(S): There are two ideal locations for a targeting meeting in the TDMP process. First, a targeting meeting can be held after the mission analysis and before the COA development. This will ensure that the COAs that are developed are focused on the critical HPTs. Secondly, targeting meetings can be conducted after the formal wargaming; although targeting is discussed in wargaming as part of the action-reaction-counteraction drill, the wargaming will become too bogged down if the staff addresses all the specifics that will be discussed in a targeting meeting.



However, the targeting information discussed in wargaming should not be lost. Every effort should be made to record this information to save time during the targeting meeting.

Approximately 90 percent of targeting is addressed during the wargaming process. Examples of targeting information addressed during wargaming include:

- What targets that should be acquired and attacked.
- Where and when the targets will likely be found on the battlefield.
- Who can locate the targets.
- How the targets should be attacked.
- The required amount of damage to inflict on each target.
- Whether battle damage assessment is required on a target.

Units could do a better job of capturing targeting information. The S2 along with the FSO should have a separate recorder available at the wargaming session with the specific mission to capture targeting information. However, this may not be practical at the battalion level because of the staff manning of these two sections. If the S2 and FSO do a good job during the wargaming process, the following products

should be completed at the end of this process:

- High-payoff target list (See figure 5-3, HPTL). For the HPTL the S2 needs to concentrate the R&S plan to locate and track these targets. PIRs along with the HPTL should focus the R&S effort. If the HPTL and the commander's PIRs are not complimentary, the S2 should focus the limited collection assets on answering the PIRs.

- Target selection standards. The S2 should be concerned with target selection standards, because the S2 must understand how accurate the intelligence needs are in order to engage the target. Example: If the S2 is using SIGINT methods to locate a target, the target may not be engaged with some systems due to fire restrictions and a need to have human "eyes on the target."

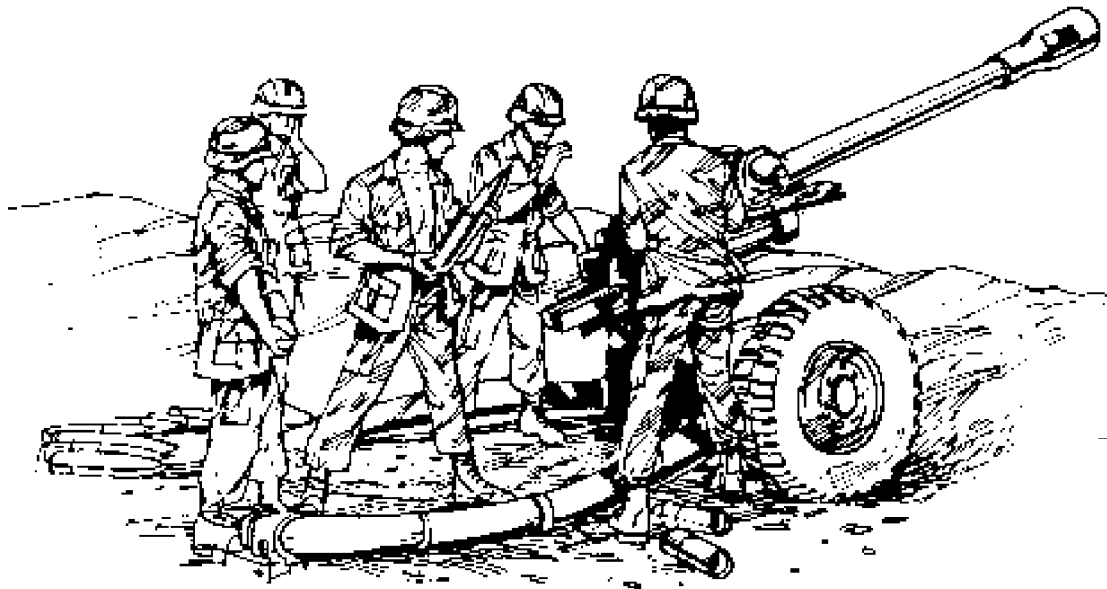
- Collection plan (This was discussed earlier in the Collection Management Chapter.

- Attack guidance matrix (See figure 5-4). The S2 should concentrate on Electronic Warfare (EW) support and battle damage assessment in the attack guidance matrix.



Priority	Category	Sheet Number	Description
1	1 C ³ (Time sensitive)	FSO TGT SHT #	REG main CP
2	2 FS (Time sensitive)		RAG CP/COP
3	1 C ³ (Time sensitive)		MRR FWD CP
4	2 FS		Artillery Battery
5	3 MAN		Bn assembly area
6	3 MAN		MR/Tank Company
7	4 ADA 4 ADA 7 REC		SA 9/13 Platoon ZSU 23-4/2S6 Platoon REG Recon Patrol
8	9 POL		POL Platoon
9	10 Ammo		Ammo and Cargo Platoon

Figure 5-3. High-Payoff Target List (HPTL)





CATEGORY	HIGH PAYOFF	WHEN	HOW	RESTRICTIONS
C3	46, 48	I	N/EW	COORDINATE ATTACK WITH EW
FS	1, 2, 7	A	N	DNE MRL OLDER THAN 10 MINUTES
MAN	25, 28	A	25%	LAST VOLLET RAAMS/ADAM
ADA	58	P	S/G2	SEAD PROGRAM 120800A
ENGR	85	P	N	COUNTERMOBILITY PROGRAM O/O
RISTA	103, 105	P	EW	
REC	111, 112	P	N	
NBC		I	D	ACCURACY 0-200 METERS; TDA REQUIRED
BULK FUEL		A	D	
AMMO		A	D	
MAINT		P	N	NOT HVT OR HPT
LIFT		P	N	NOT HVT OR HPT
LOC		P	N/G3	NOT HVT OR HPT - NO FASCAM
LEGEND: ADAM = AREA DENIAL ARTILLERY MUNITION MRL = MULTIPLE ROCKET LAUNCHER DNE = DO NOT ENGAGE RAAMS = REMOTE ANTIARMOR MINE SYSTEM FASCAM = FAMILY OF SCATTERABLE MINES SEAD = SUPPRESSION OF ENEMY ADA <div style="display: flex; justify-content: space-around;"> I = IMMEDIATE A = AS ACQUIRED S = SUPPRESS </div> <div style="display: flex; justify-content: space-around;"> P = PLANNED N = NEUTRALIZE D = DESTROY </div>				

Figure 5-4. Attack Guidance Matrix

DETECT

During this step, the S2 executes the collection plan that will satisfy specific information requirements that support the targeting process. The S2 focuses collection assets on NAIs at the appropriate time to detect the HPT. The event and decision support templates (DSTs) play a critical role in the detection process. The collection and dissemination of combat information is critical to the “detect” function. The desired HPTs must be detected in a timely accurate manner. Therefore, the clear and concise taskings must be given to all intelligence collection assets. (See collection management chapter for tasking TTPs.)



OBSERVATION: Often, S2s do not know the target acquisition capabilities of all division collection assets.

DISCUSSION: S2s should know all the capabilities of collection assets within the division. Often, S2s know the capabilities of battalion asset capabilities but do not know the

capabilities of the collection assets within the aviation brigade and division artillery units. These are critical collection assets that can assist the S2 with the collection plan and “detecting” the threat. Many S2s fail to consider these assets as they focus their collection plan.

DIVISION ACQUISITION ASSETS				
SOURCE	ASSET	AVAILABILITY		
		HEAVY DIV	LIGHT DIV	AIRBORNE OR AIR ASSAULT DIV
MI BATTALION (CEWI)	TLQ-17A Trafficjam	X		X
	MSQ-103 Teampack	X		X
	TSQ-138 Trailblazer	X		
	TRQ-32 Teammate	X	X	X
	GSR AN/PPS-5 and 15	X	X	X
	ALQ-151 Quickfix	X	X	X
	REMBASS		X	X
	MRDFS	X	X	X
Maneuver Brigade	COLT	X	X	X
Maneuver Bn	Scouts	X	X	X
	Patrols	X	X	X
	FIST	X	X	X
DIV Arty TA Battery	AN/TPQ-36 WLR	X		
	AN/TPQ-37 WLR	X		
	AN/TPS-25 and 58 MTLR	X		
DS FA Bn Command Avn	AN/TPQ-36 WLR		X	X
	OH-58D (AFSO)	X		
Cavalry/Recon Sqdn	Reconnaissance Assets	X	X	X
Aviation Bde	EH-1/EH-60A Quickfix	X	X	X

Figure 5-5. Division Acquisition Assets



LESSON(S): S2s should coordinate with the FSO and Aviation LO to learn more about the capabilities and deployment of artillery and aviation collection assets within the division. Many of these assets

are available down to the battalion level. Figures 5-5 and 5-6 show division acquisition assets and planning ranges for these assets.

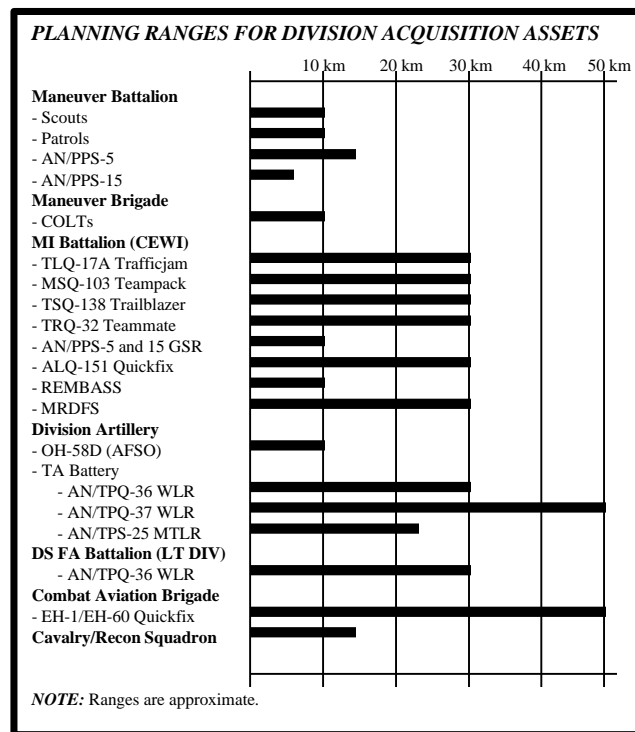


Figure 5-6. Planning Ranges for Division Acquisition Assets



OBSERVATION: The dissemination of targeting information is not timely in many units.

DISCUSSION: Frequently in units, targeting information arrives at the TOC in sufficient time for the target to be engaged. Therefore, units do not disseminate the time-sensitive information to the weapon systems that will engage the targets resulting in a lost opportunity most collection assets cannot track targets for an extended period of time). In most cases, this can be attributed to inadequate information management and SOPs. Often, critical messages are delayed due to a backup in logging messages in the various TOC journals or RTOs not understanding the critical nature of the information that they are receiving.

LESSON(S): The collection management chapter of this newsletter provides some TTPs for information management. CALL Newsletter 95-7, *Tactical Operations Center (TOC)*, also provides additional techniques.

SOPs for information management may also have to be altered to allow an officer or senior NCO to screen messages as they come in over the radio. Another technique would be to train all RTOs in the TOC on targeting, explaining the time-sensitive nature of the reports. Various charts or butcher block paper should be used to show the HPTL and PIR. These charts should be in plain view of the RTOs. The RTOs should also know how to read the charts and their purpose.

DELIVER

After the S2 identifies an HPT, the S2 quickly disseminates the information to the targeting cell to interdict the target at the appropriate TAI. Again, the DST plays a critical role in the third step of the targeting process. The attack of targets must satisfy the attack guidance that is developed in the “decide” function of the targeting process. The S2 can continue to track a target throughout an engagement to give a battle damage assessment (BDA). The achievement of desired results is why the BDA is critical. If not, continued tracking supports immediate re-engagement.



OBSERVATION: Often, S2s locate targets but do not have collection assets in place to determine battle damage of the engaged target.

DISCUSSION: Battle damage assessment is always desirable, but not always necessary. Battle damage assessment for specific targets is based on the commander's guidance and recommendations from the S2 and the fire support targeting officer. Infrequently, the same collection asset that acquired the target can provide BDA on the effectiveness of the attack. The decision on which targets that require damage assessment must be made in the "decide" function of the targeting process. Some collection assets that are used for damage assessment may not be available for collection of PIR information. Therefore, a balanced mix must be reached on which targets BDA is required. BDA is more than just determining the number of casualties and equipment destroyed. It also includes:

- Whether targets are moving or hardening in response to the attack.
- Changes in deception efforts and techniques.

- Increased communication efforts as the result of jamming.

- Whether the damage achieved is having the expected effect on the threat combat effectiveness.

LESSON(S): The S2 often underestimates the time required to engage a target. The S2 may depend on the same collection asset to provide BDA. In many instances, the collection asset is not in a position to observe the target due to a time lapse. S2s should make every effort to validate their event templates and time phase lines. This may require a ground reconnaissance. In addition S2s should understand how long it takes to situate the designated weapon system on line to fire the target. The S2 can improve his knowledge of these delivery systems by speaking to those subject matter experts (FSO, Air Liaison Officer, Tactical Air Controller) and retrieve the information. It is too late to do this once a mission is received. This knowledge should be acquired by the S2 at home station prior to deployment. ☺



Section VI

STAFF INTEGRATION AND INTELLIGENCE TRAINING

Staff Integration

Commanders should view their staffs as a unified team when considering the IPB process. IPB is not just the S2's responsibility. The entire staff should contribute in their area of expertise. The intelligence section does not have the resources, people, or, frequently, the knowledge to conduct IPB by themselves.

OBSERVATION: Many units have the S2 section conduct all aspects of the IPB process without any help from the staff.

DISCUSSION: During most missions, the staff is waiting for the S2 to develop the enemy situation before the tactical decisionmaking process can begin. The staff should put this time to good use and assist the S2 in the development of the IPB products. Many staff officers can help the S2 in their areas of responsibility if directed to do so.

Using the experience of the entire staff helps the command produce the best available IPB products.

LESSON(S): Commanders should direct their staffs to help the S2 in the development of IPB products. The XO should closely monitor the staff sections and ensure that they are providing assistance to the S2. The command and staff sections can contribute to the IPB process with the established responsibilities outlined below.



Commander	<ul style="list-style-type: none"> • Approve PIRs. • Assist in the selection of the enemy's most probable and most dangerous COAs • Provide guidance for R&S planning and HPT selection.
S3	<ul style="list-style-type: none"> • Provide input on enemy doctrine and tactics. • Assist the S2 develop PIR. • Select HPTs, TAIs, and decision points with the S2 and FSO. • Allocate resources for R&S planning. • Develop the DST in coordination with the battle staff. • Execute staff supervision over EW, PSYOP, OPSEC, and deception activities.
FSO	<ul style="list-style-type: none"> • Plan and direct FA support to R&S/counter-reconnaissance efforts. • Assist the S2 in developing situational and event templates of probable enemy employment of fire support assets. • Provide the S2 any enemy intelligence gained through DIVARTY channels. • Participate in the selection of HPTs, TAIs, and decision points.
Engineer	<ul style="list-style-type: none"> • Provide staff expertise on enemy M/CM/S doctrine, tactics, and equipment capabilities. • Assist in the development of the situation/event templates with probable enemy employment of engineer assets and obstacle emplacements. • Provide the S2 any enemy intelligence gained from the engineer brigade. • Assist the S2 with detailed terrain analysis and the MCOO. • Brief OCOKA factors for each avenue of approach and mobility corridors. • Coordinate use of engineer reconnaissance with the S2. • Participate in selection of decision points. • Conduct choke point, minefield and ambush site analysis from an enemy point of view. • Participate in the selection of DPs, NAIs, and TAIs for obstacles.
ADA LO	<ul style="list-style-type: none"> • Provide input to the S2 on enemy rotary/fixed-wing air asset capabilities and employment. • Template rotary- and fixed-wing air avenues of approach with the S2. • Identify probable enemy DZs and LZs.
Aviation LO	<ul style="list-style-type: none"> • Provide input to the S2 on enemy ADA system capabilities and employment. Assist the S2 in templating those positions. • Provide information to the S2 on enemy rotary-wing lift and attack assets and employment. • Track enemy ADA locations and assist in SEAD planning. • Identify potential PZs/LZs.



DS MI CO Cdr	<ul style="list-style-type: none"> • Provide input to the S2 on enemy IEW asset capabilities and employment. Assist the S2 in templating those locations. • Recommend missions for, and placement of, friendly IEW systems during R&S planning. • Recommend electronic HPTs, TAIs, and DPs to support TAIs.
NBC Officer	<ul style="list-style-type: none"> • Provide input to the S2 on enemy NBC capabilities and employment. Assist the S2 in templating the locations of these assets and probable enemy chemical strike locations. • Advise the S2 of weather and terrain impacts on NBC effectiveness. • Advise S2 on enemy smoke use.
AF LO	<ul style="list-style-type: none"> • Provide input to the S2 on enemy fixed-wing aircraft capabilities and employment. • Provide input to the S2 on enemy high altitude ADA equipment capabilities and employment. Help template these locations.

These are just some examples of how commanders can use other staff members to help the S2 develop IPB products. Using this technique should improve the quality and speed of IPB products developed because the entire staff covers every enemy BOS in great detail. If practiced frequently, the combined IPB effort of the staff should reduce the initial time required to conduct IPB and help the command in beginning the decisionmaking process in a more timely manner.

Unit Intelligence Training

OBSERVATION: Intelligence training is usually not emphasized during brigade, battalion, and company field training exercises.

DISCUSSION: Units do incorporate some form of intelligence training into their field training exercises. Units that do this tend to do these intelligence tasks well when they train at the combat training centers. Units that train intelligence tasks as individual tasks only tend to do worse at the CTCs. Units can benefit more from training exercises if intelligence is emphasized.

Units still conduct the maneuver training that they need, but a couple of intelligence tasks are added into the training and emphasized. SALUTE reporting and patrol debriefs are just two examples of intelligence training that can be incorporated into any training scenario. The next few paragraphs discuss some ways that intelligence training can be incorporated into unit field training exercises at the brigade, battalion, and company levels.



LESSON(S):

Brigade Level: The focus at the brigade level should be on training the brigade and battalion intelligence staffs. Battalion force-on-force and freeplay exercises are an excellent way for S2s to train on all intelligence functions. This allows both Battalion S2s to conduct IPB and collection management against a thinking enemy. The brigade's MI Battalion company team should also be incorporated into these type exercises. This gives the brigade S2 the opportunity to practice his collection management techniques and establish good SOPs with the MI company team. This added benefit can also be passed down to the battalions. Having these assets available during training exercises gives battalion S2s the opportunity to practice collection management techniques and work with the actual collectors. In this way, S2s can better understand the capabilities and limitations of these collection assets and the proficiency of the soldiers that operate these systems. During AARs, the opposing S2s should brief "what they thought happened" before the S3s or commanders brief what actually happened. In this way, the S2s can gauge how well they developed the threat situation for their respective commanders. The brigade S2 should also hold a separate AAR for intelligence units and collection assets. The S2 can address intelligence shortcomings and strengths for each unit.

Brigade S2s should also establish a training plan for all brigade intelligence

assets. Earlier in this newsletter, numerous data bases and threat models were discussed. Brigade S2s should take this approach and divide possible contingency areas among the subordinate units within the brigade. Taking this approach allows the brigade to develop all the intelligence products that it requires and ensures that work is not duplicated. The brigade S2 should prioritize this work list based on guidance from the brigade commander. Another area that the brigade S2 should consider training is the intelligence SOPs that the unit has established. This type training solves all of the problems in regards to formats and varying quality of intelligence products that are produced at both the brigade and battalion levels.

Battalion Level: For battalion FTXs, the S2 should concentrate on battalion internal SOPs. The S2 needs to work very closely with the unit's scout platoon. He should deploy with the scout platoon and observe and participate in as much training as possible. The S2 should work very closely with the scout platoon leader as the scout platoon mission-essential task list (METL) is developed. The S2 should ensure that most of the scout platoon's METL is oriented on intelligence tasks. A major topic of training should be intelligence reporting. The SALUTE report has proved its worth on more than one occasion, but many units do not properly train on using this report.



If used properly, this report contains all the pertinent intelligence information that needs to be reported. As mentioned earlier, battalion FTXs are another opportunity for S2s to practice the deployment of MI battalion assets. Most MI company team assets could easily be incorporated into any battalion FTX. Commanders should also train their S2s to maintain the enemy situation when the TOC “jumps.” Most intelligence sections are understaffed, and it is a major task for them to maintain the enemy situation when the TAC is deployed while the TOC is “jumping.”

Company Level: S2s very rarely get involved with company training. In most cases, this is a missed opportunity. The S2 should try to get personnel from his intelligence section to participate in company training events. Many company commanders welcome the opportunity to have a trained intelligence soldier with them in their company headquarters. With these intelligence soldiers participating in company training, there is an opportunity to “push” intelligence training. The S2 participant can help teach the company’s leaders IPB and show why intelligence reporting is critical to the battalion’s mission. The S2 himself needs to be “out on the line” with the companies. If companies are participating in force-on-force exercises, the S2 can split his section and augment company headquarters and practice their

IPB skills. This can be a very valuable lesson to S2 personnel because they can compare their situation templates and terrain analysis products with what is actually on the ground. Debriefing patrols is another area that can be practiced at this level. This serves two purposes. First, it allows S2s to practice their debriefing skills. Second, patrol debriefings focus company patrols on the types of information that the S2 is looking for to support intelligence operations. This teaches the patrols to look for specific information that the S2 needs. Often, many patrols do not understand exactly what they are supposed to report. With this type training, S2s can practice developing indicators and phrasing them in a way that patrols can understand. While working directly with company line units, the S2 can emphasize correct and timely intelligence reporting. The use of the SALUTE report is critical. S2s can also use MI battalion assets to augment company training. A typical example is augmenting a company with a GSR team. This helps both the intelligence unit and the company to gain an appreciation of each other’s capabilities. In most cases, the MI battalion has a specific slice that it can provide to each brigade. If the same personnel participate with the same units, then a working relationship can be fostered.

S2 Section Intelligence Training



A main problem that many intelligence sections face is time to train the intelligence personnel within their sections. With many intelligence sections undermanned, S2s concentrate on just trying to conduct the daily operations that the intelligence section must do in a garrison environment. Although these tasks are important, they will probably not get someone killed. However, if the S2 has an untrained intelligence section in a combat environment, many good soldiers could die because the intelligence section failed to do their mission. Therefore, the S2 should focus on the section's warfighting skills. The S2 should allocate sufficient time to train the intelligence personnel in his section on intelligence skills needed to support the commander in the field. Often, the S2 thinks that he can do all of the required intelligence products by himself. However, he cannot. If the S2 section does not work together to develop IPB products, the unit usually fails because this causes unneeded delays in the tactical decisionmaking process. It also impacts the unit because other personnel are not able to pick up the slack when the S2 is not available. Different S2 sections are at different levels of training. The first thing an S2 needs to do when he arrives at a unit is assess the capabilities of his section. As a minimum, every member of the intelligence section needs to be able to:

- Review intelligence holdings and reports to identify gaps.
- Maintain intelligence journal and the journal file.
- Prepare and maintain situation maps and associated overlays.
- Maintain order of battle workbook and files.
- Organize intelligence files.
- Integrate incoming information into current holdings.
- Assist in the preparation and presentation of intelligence briefings.
- Process all-source intelligence information to develop and update threat data base.
- Develop combined obstacles overlay.
- Develop avenues of approach using modified combined obstacles overlay.
- Determine mobility corridors within identified avenues of approach.
- Identify and list information gaps (PIR and IR) for a specific operation.
- Prepare a listing of indicators for each PIR and IR for a specific operation.
- Prepare draft orders and requests to support the collection effort.
- Evaluate incoming information in accordance with indicators.
- Draft intelligence reports.
- Develop doctrinal templates for threat evaluation.
- Prioritize avenues of approach to size, directness, and length.
- Develop situation templates.
- Identify decision points.
- Develop event templates and event analysis matrix based on situation templates.



- Identify and annotate target area of interest and named area of interest.
- Compute time movement capabilities between named areas of interest.
- Determine threat probable courses of action.
- Prioritize threat courses of action according to probability of adoption.
- Develop decision support template.

The final portion of this newsletter will focus on the development of the Decision Support Template (DST). Although the DST is not the responsibility of the S2, the S2 provides most of the products that are required to develop the DST.

Decision Support Template (DST) Development

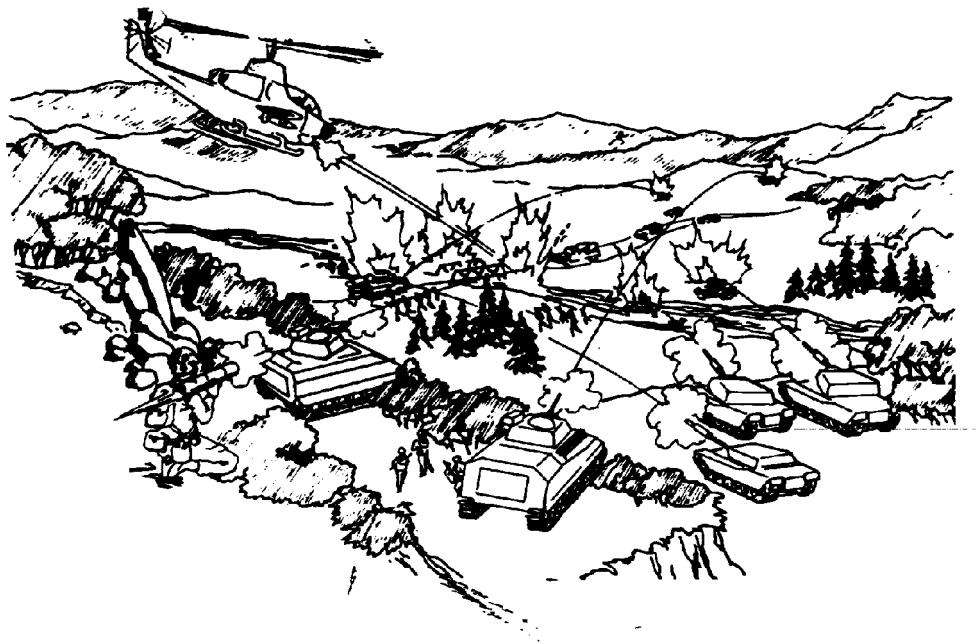
Units at the CTCs experience many problems developing the DST. The planning process often ends with the development of a synchronization matrix. The synchronization matrix alone does little to assist the commander in identifying potential decision points throughout the battle. A synchronization matrix, coupled with a decision support template, can assist the commander in identifying and anticipating decisions on the battlefield. The development of the decision support template begins early in the IPB process. It is a systematic approach to detect the critical events on the battlefield and the reactions or decisions that both friendly and enemy commanders must make to accomplish their missions. The IPB process provides the framework to predict where, when, and what probable decisions friendly and enemy units make as they interact on the battlefield.

This section presents and explains a six-step process designed to assist units in understanding and developing DSTs. The six steps are: ● **Step No. 1 - Modified Combined Obstacle Overlay (MCOO)/Avenue of Approach (AA) Overlay Development**

- **Step No. 2 - Enemy Situation Template (SITEMP) Development**
- **Step No. 3 - Event Template (EVENTEMP) Development**
- **Step No. 4 - Targeted Area of Interest (TAI) Development**
- **Step No. 5 - Friendly Course of Action (COA) Development**
- **Step No. 6 - Decision Point and Critical Event Development**



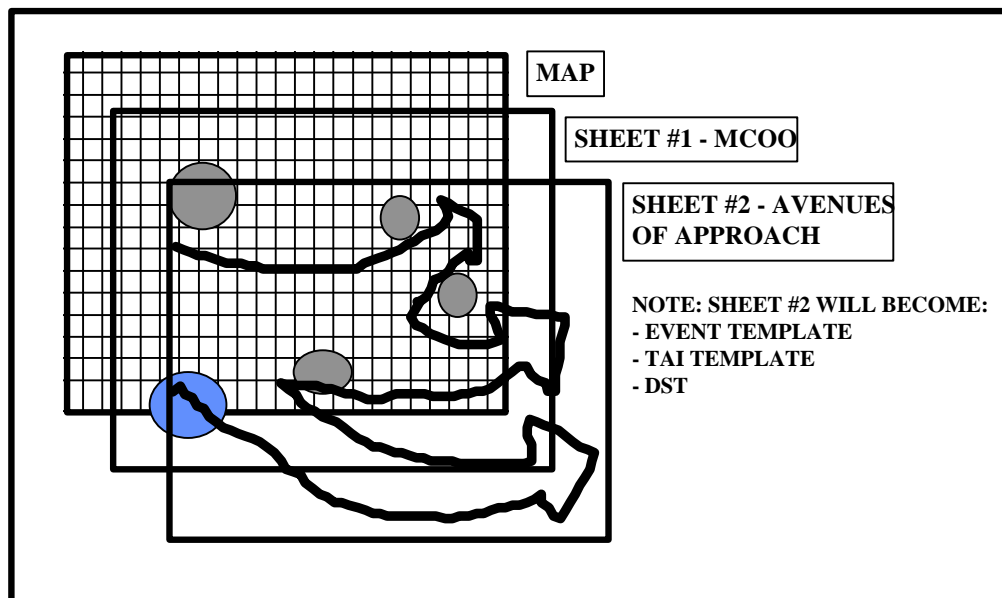
The development of a DST uses products developed throughout the entire planning process. It is not something that is exclusively done after the plan is developed. The goal is to use products that are previously developed during the planning process and create a useful tool that can help the commander make decisions at critical points on the battlefield.





STEP No. 1 - Modified Combined Obstacle Overlay (MCOO)/Avenue of Approach (AA) Overlay Development

The first step in the development of the DST is the development of the modified combined obstacles overlay. The MCOO then enables the S2 to develop an AA overlay identifying threat avenues of approach. The MCOO and avenues of approach assist the commander and staff in identifying options that are available to both the friendly and enemy commander concerning maneuver. The AA overlay will be used throughout the DST development process, and will eventually become the DST.



Step No. 1: Develop MCOO/AA Overlay

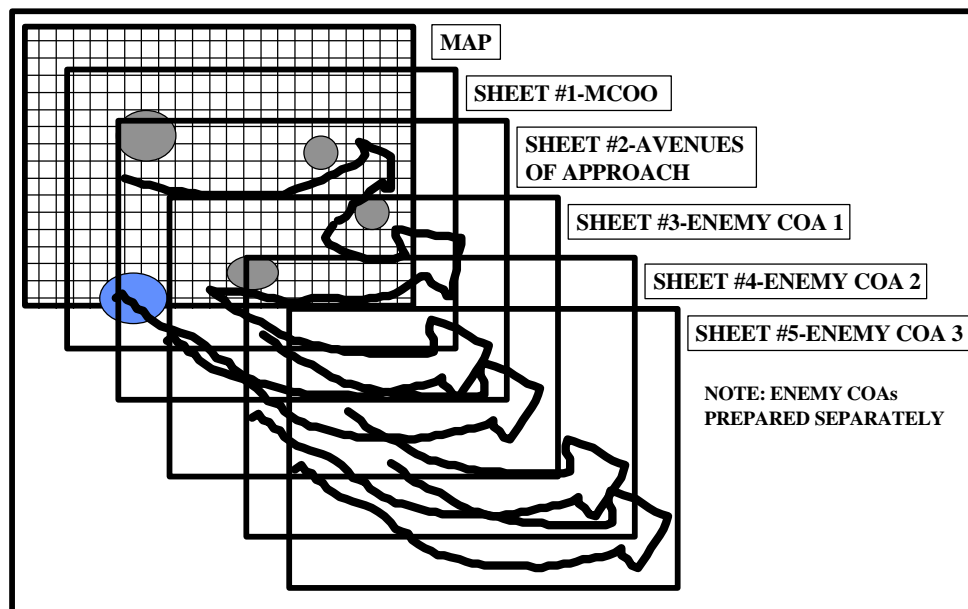


STEP No. 2 - Enemy Situation Template (SITEMP) Development

The second step in the DST development process is the development of the enemy SITEMPs. Time may preclude the development of multiple enemy COAs, but at least two most probable and most dangerous COAs should be considered. The commander should provide the S2 with guidance as he develops his SITEMPs. This guidance may include the number of enemy COAs that he should develop, or other specific aspects the S2 should consider. The S2 should develop each COA in the same amount of detail. Each COA should address:

- **who?** - what element
- **what?** - type of operation
- **when?** - time the action will begin
- **where?** - sector, zone, avenue of approach, or objectives the enemy will use.
- **how?** - method the enemy will use to employ his assets.

Each COA should include a list of HVTs that the staff uses in the wargaming and targeting process. The set of enemy COAs provides a basis for formulating friendly COAs.

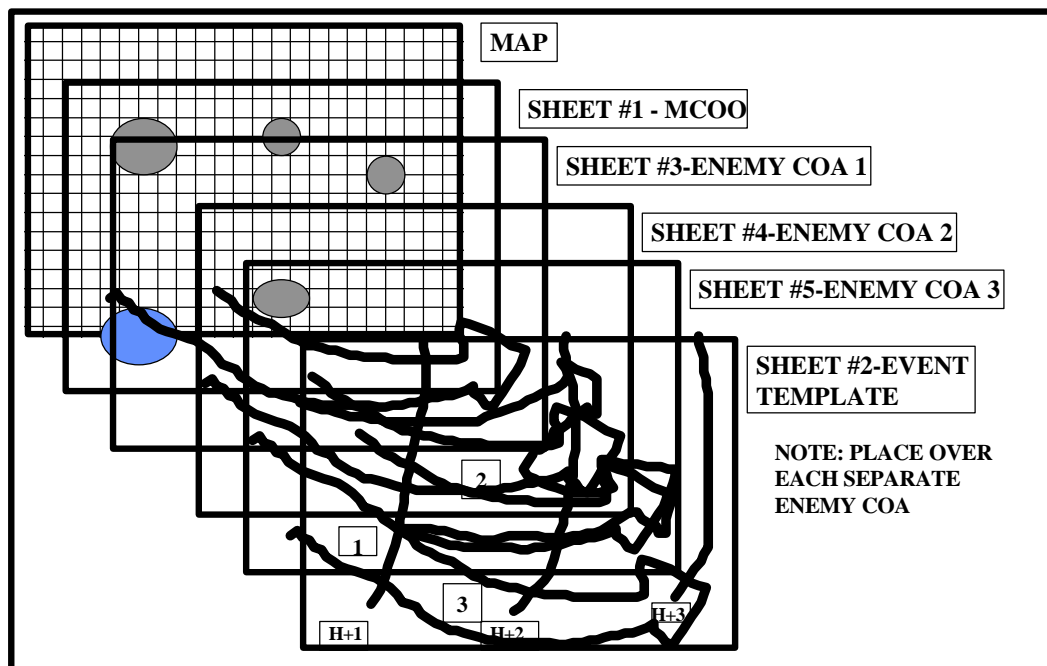


Step No. 2: Enemy COA Development



STEP No. 3 - Event Template (EVENTEMP) Development

The development of the Event Template (EVENTEMP) is the third step in the DST development process. As the S2 develops each enemy SITEMP, he should mentally wargame each enemy COA and identify those locations where enemy activity in each COA helps distinguish that specific COA from the others. These areas become named areas of interest (NAIs) for each SITEMP. The SITEMPs are then placed individually under the AA overlay. The NAIs from each enemy SITEMP are then transferred to the AA overlay. The S2 should focus on those NAIs that assists him in determining and identifying which COA the enemy selects. NAIs that are common to all COAs serve no purpose. This AA overlay now becomes the EVENTEMP. This EVENTEMP can also serve as a guide in the development of the collection and R&S plan. It depicts when and where to collect information.

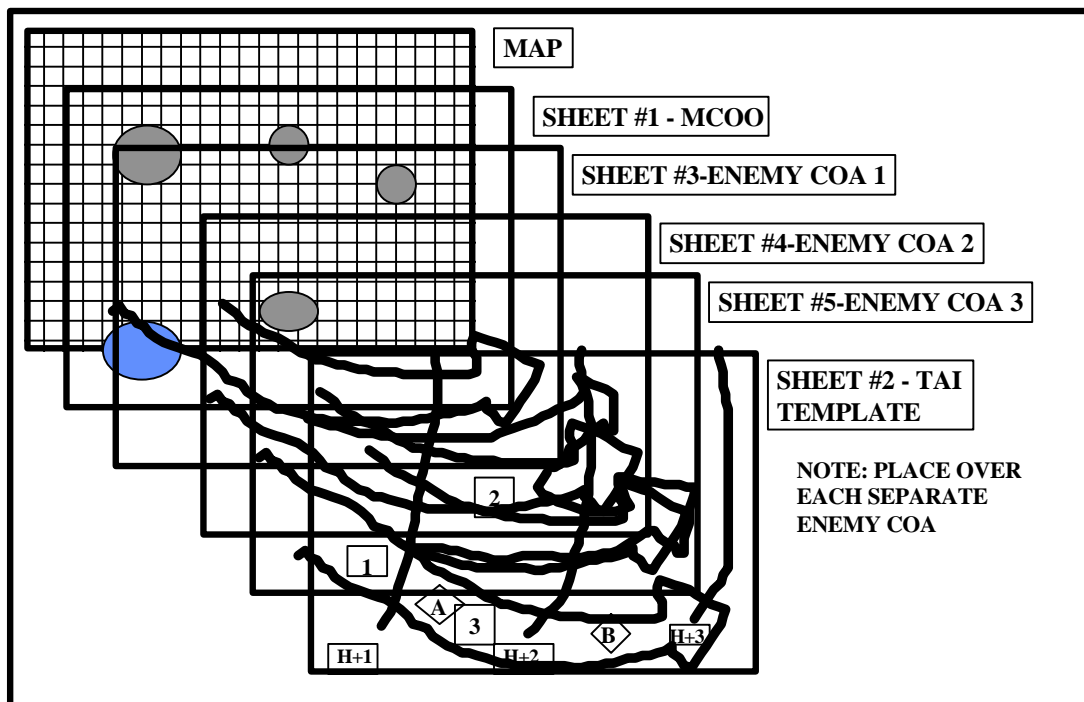


Step No. 3: Event Template Development



STEP No. 4 - Targeted Area of Interest (TAI) Development

The addition of targeted areas of interest (TAIs) is the next step of the DST development process. Incorporating TAIs into the DST development process is identical to step 3. As the S2 develops each enemy SITEMP, he must identify those locations and events where the enemy may employ potential High Value Targets (HVTs). These areas become TAIs and are marked on each individual SITEMP. These TAI overlays are then placed individually under the AA/EVENTEMP (overlay #2) and the TAI s are copied onto overlay #2. TAIs are defined as points or areas where the friendly commander can influence the action by fire and/or maneuver.

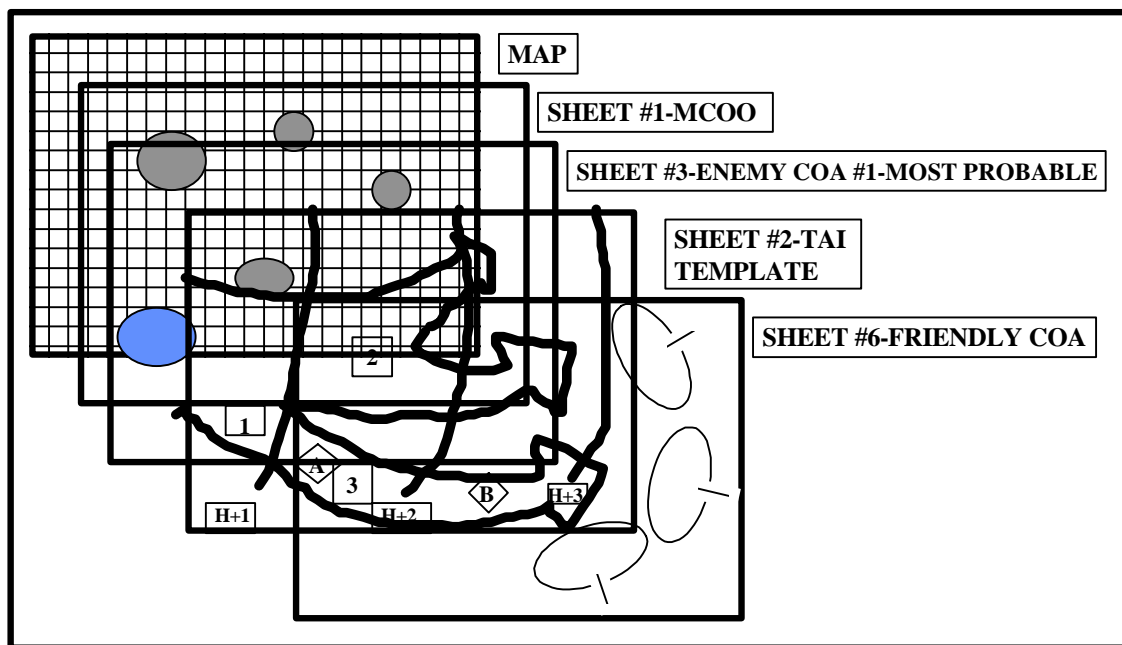


Step No. 4: TAI Development



STEP No. 5 - Friendly Course of Action (COA) Development

The fifth step in developing the DST is friendly COA development. The staff develops friendly COAs based on the commander's guidance and the facts and assumptions identified during IPB and mission analysis. The commander's guidance provides a basis for the initial forces array needed to counter the enemy's actions. The S2's role in friendly COA development is to ensure that each friendly COA takes advantage of the opportunities that are offered by the environment (weapons firing lines, best defensive terrain, intervisibility lines) and the threat situation (enemy weaknesses).

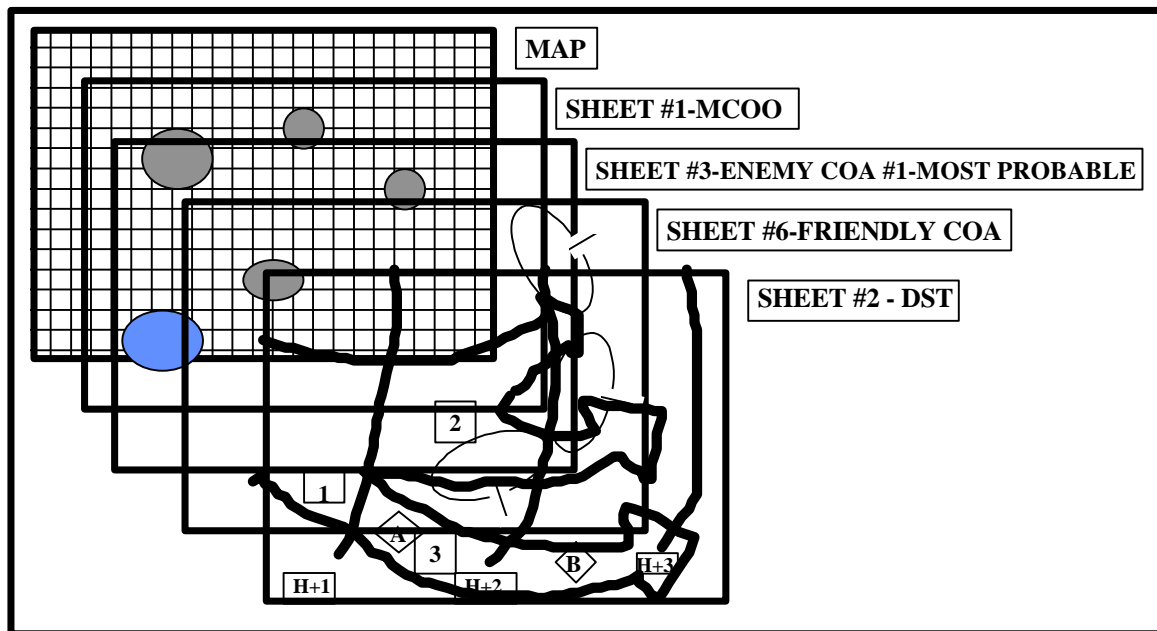


Step No. 5: Friendly COA Development



STEP No. 6 - Decision Point and Critical Event Development

The sixth step in the DST developmental process is to identify decision points throughout the battlefield. This takes place when the staff wargames the enemy and friendly COAs. The TAI/event template is placed over the friendly and enemy COA overlays. As the staff wargames the COAs, a recorder, usually the assistant S3/S2, captures the results of this wargaming process in a synchronization matrix. During the battle, the staff identifies all the critical events, locations, times and decisions that both friendly and enemy commanders must make. As the staff proceeds through the action-reaction-counteraction drill, this information is added to the TAI/event template. At the completion of the wargaming process, the TAI/event template becomes the DST. The DST should contain the same information as the synchronization matrix, but in a graphic form.★



Step No. 6: Decision Point and Critical Event Development